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P. B. MINGLE & CO'S
ALMANAC
AND
GARDEN MANUAL
1899

Goddess Print, 716 Chestnut St. Phila.

103 Market St., Philadelphia.

TAKE NOTICE

Ladies and Gentlemen coming to the City, and finding themselves encumbered by Waterproofs, Overcoats, Satchels, &c., can leave such articles at our Store until their return home.

Also, Ladies shopping can have their bundles sent to the Store, taking them up as they go to the Ferries or Cars.

We shall be glad to accommodate our friends in this way.

Very respectfully,

P. B. MINGLE & CO.

1899	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
JAN..	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				
FEB..				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29			
MAR..				1	2	3	
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	31
APRIL	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30					
MAY..				1	2	3	4
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31		
JUNE				1	2		
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30

Philadelphia Street Directory

No.	North.	No.	South.
1	Market,	1	Market, Jayne
100	Arch, Cherry,	100	Chestnut,
200	Race, New,	200	Walnut,
300	Vine, Wood,	300	Spruce, Union
400	Callowhill,	400	Pine,
500	Buttonwood,	500	Lombard,
600	SpringGarden	600	Suth,
700	GreenMtVern	700	Baunbridge,
700	Wallace	800	Catherine,
800	Fairmount,	900	Christian,
800	Brown,	1000	Carpenter,
900	Poplar,	1100	Washington,
1200	Girard Ave.,	1200	Federal,
1300	Thompson,	1300	Wharton,
1400	Master,	1400	Reed,
1500	Jefferson,	1500	Dickerson,
1600	Oxford,	1600	Tasker,
1700	Columbia Ave	1700	Morris,
1800	Montgomery,	1800	Moore,
1900	Berks,	1900	Mifflin,
2000	Norris,	2000	McKean,
2100	Diamond,	2100	Snyder,
2200	Susquehanna,	2200	Jackson,
2300	Dauphin,	2300	Wolf,
2400	York,	2400	Ritner,
2500	Cumberland,	2500	Porter,
2600	Huntingdon,	2600	Shunk,
2700	Lehigh Ave.,	2700	Oregon Ave.
2800	Somerset,	2800	Johnson,
2900	Cambria,	2900	Bigler,
3000	Indiana,	3000	Pollock

1899	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
JULY							
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31					
AUG.							
	1	2	3	4	5	6	7
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31		
SEPT.							
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
OCT.							
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				
NOV.							
	1	2	3	4	5	6	7
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		
DEC.							
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31						



TO OUR PATRONS.



JN presenting our Seed Annual for 1899, we desire to call your attention to the following points as being worthy of your most serious consideration in connection with placing your orders for Seeds. In deciding where to purchase the yearly supply of Seeds, one should be influenced by the reliability and integrity of the seedsman and his facilities for supplying seeds in abundance of the best quality. The possible outcome in the way of profit on lots of even a small investment in seeds is so great that the quality should out-weigh every other consideration. A second point of scarcely less importance is of having your orders filled promptly and satisfactorily. In producing and handling our seeds, we take every precaution to have them all of the highest quality, and true to name.

In the following pages we give an accurate description of the varieties we handle, and we can assure our readers that from our Catalogue they can select a list of seeds that will meet every requirement, and our prices are as low as possible, consistent with the highest quality. We feel grateful for the liberal patronage bestowed us in the past, feeling assured that the best quality of seeds, fair and honest dealing, prompt attention to filling and shipping of orders by competent and experienced seedsmen we will continue to meet with the approbation of our customers, in the future as in the past.

Yours, truly,

P. B. MINGLE & CO.



1899



1899

1st Month,

31 Days.

MOON'S PHASES.

© Last Quarter	4d. 10h. 21m. A.	© First Quarter	18d. 11h. 36m. M.
㉙ New Moon	11d. 5h. 49m. A.	㉛ Full Moon	26d. 2h. 34m. A.

Jan. 1st—Day's Length: 9 hours, 22 minutes.

Day of Year.	Day of Month.	Day of Week.	Sun at Noon Mark.	CALENDAR FOR NEW YORK CITY, PHILADELPHIA, Pennsylvania, Connecticut, New Jersey, Ohio Indiana and Illinois.				High Water Philadelphia
				Sun Rises.	Sun Sets.	Moon Rises.	H. M.	
1	1	1	H. 12 3 53	7 25	4 43	9 24	4 22	
2	2	M	H. 12 4 21	7 25	4 44	10 23	5 0	
3	3	Tu	H. 12 4 49	7 25	4 45	11 25	5 37	
4	4	W	H. 12 5 16	7 25	4 43	morn	6 17	
5	5	Th	H. 12 5 43	7 25	4 47	29	7 1	
6	6	Fr	H. 12 6 10	7 25	4 48	1 36	7 56	
7	7	Sa	H. 12 6 36	7 25	4 49	2 44	9 3	
8	8	㉙	H. 12 7 1	7 24	4 50	3 57	10 13	
9	9	M	H. 12 7 26	7 24	4 51	5 8	11 26	
10	10	Tu	H. 12 7 51	7 24	4 52	6 10	ev. 31	
11	11	W	H. 12 8 15	7 24	4 53	7 3	1 25	
12	12	Th	H. 12 8 38	7 23	4 54	sets	2 20	
13	13	Fr	H. 12 9 1	7 23	4 55	7 27	3 10	
14	14	Sa	H. 12 9 23	7 23	4 56	8 42	3 57	
15	15	㉙	H. 12 9 44	7 22	4 57	9 55	4 43	
16	16	M	H. 12 10 5	7 22	4 59	11 4	5 27	
17	17	Tu	H. 12 10 25	7 21	5 0	morn	6 11	
18	18	W	H. 12 10 44	7 21	5 1	12	6 59	
19	19	Th	H. 12 11 2	7 21	5 2	1 18	7 54	
20	20	Fr	H. 12 11 20	7 20	5 3	2 21	8 55	
21	21	Sa	H. 12 11 37	7 19	5 4	3 21	9 58	
22	22	㉙	H. 12 11 53	7 18	5 5	4 16	10 58	
23	23	M	H. 12 12 9	7 17	5 7	5 7	11 51	
24	24	Tu	H. 12 12 23	7 17	5 8	5 51	morn	
25	25	W	H. 12 12 37	7 16	5 9	6 29	38	
26	26	Th	H. 12 12 50	7 16	5 10	rises	1 18	
27	27	Fr	H. 12 13 2	7 15	5 11	6 18	1 56	
28	28	Sa	H. 12 13 0	7 14	5 13	7 16	2 35	
29	29	㉙	H. 12 13 24	7 13	5 14	8 17	3 11	
30	30	M	H. 12 13 33	7 12	5 15	9 17	3 48	
31	31	Tu	H. 12 13 42	7 12	5 16	10 18	4 25	

Conjectures of the Weather.

The 1st—3rd, changeable; 4th—6th, clear and cold; 7th, 8th, snow; 9th—11th, changeable; 12th—14th, clear and windy; 15th, 16th, cold and snow; 17th, 18th, clear and cold; 19th—21st, variable; 22nd—24th, clear and pleasant; 25th—26th, stormy and snow; 27th—28th, cold and blustery; 29th—31st, Snow.

U. S. RATES OF POSTAGE.

	PER OZ.
Letters within U. S.	2 cents.
City drop letters.	2 "
Postal Cards to any part.	1 cent each
Registered letters, proper postage.	8 cents.
Immediate delivery letters, besides regular postage, Special Stamp, 10 "	

POSTAGE ON SECOND CLASS MATTER.

Which embraces Newspapers, Magazines and periodicals published not less than four times a year.—One cent prepaid per pound or fraction thereof when mailed by publisher or news-agent to regular subscribers.

Second-class Matter mailed by other persons than publishers or news-agents becomes special matter, specially entitled to pass through the mails at one cent for each four ounces or fraction thereof.

POSTAGE ON THIRD CLASS MATTER.

Books, pamphlets, circulars and other matter wholly in print, such as hand bills, posters, music sheets and manuscripts accompanying the same, tags and labels, seed-cuttings, bulbs, roots, etc., one cent, prepaid by stamp, for every two ounces or fraction thereof.

Packages of transient printed matter are limited to four pounds each, unless in the case where a single volume of a book shall exceed that weight.

The sender may write his name and address on the wrapper, preceded by the word "from," and may mark a passage of the text, or write on a fly-leaf a single inscription or dedication. Packages must be wrapped with open sides or ends.

POSTAGE ON FOURTH CLASS MATTER.

Merchandise, blank cards and bills, patterns, envelopes with or without printing, blanks of any kind, original paintings in oil or water colors, maps, plans or charts, letter-heads, models, ores, metals and all mailable matter not embraced in the foregoing classes. One cent prepaid by stamp, for each ounce or fraction thereof. Liquids (except poisons, explosive inflammability or offensive articles), in packages properly secured, may be transported. The limit of weight is four lbs. Except seeds, roots, bulbs, cuttings, coins and plants, the rate is one cent for each two ounces or fraction thereof. The name and address of the sender, preceded by the word "from," also the names and number (quantity) of the articles enclosed, may be written on the wrapper of fourth class matter without additional postage charge. A request to the delivering postmaster may also be written asking him to return the package if not delivered.

POSTAL NOTES AND MONEY ORDERS.

Postal Notes under \$5, payable to bearer 3 cents.

Money Orders in U. S.—Not exceeding \$5—5 cents; \$5 to \$10—8 cents; exceeding \$10 to \$15—10 cents; exceeding \$15 to \$30—15 cents; exceeding \$30 to \$40—20 cents; exceeding \$40 \$50—25 cents; exceeding \$50 to \$60—30 cents; exceeding \$60 to \$70—35 cents; exceeding \$70 to \$80—40 cents; exceeding \$80 to \$100 inclusive, 45 cents.

Money Orders to Foreign Countries—Great Britain, Ireland, France, German Empire, Canada, Belgium, Italy, Switzerland, Portugal, Algeria, Jamaica, Windwood Islands, Sandwich Islands, Victoria, Tasmania, Queensland, Cape Colony, Japan, Hong Kong, New Zealand, New South Wales, Leeward Islands, Bahama Islands and Sweden, not over \$10—10 cents; not over \$20—20 cents; not over \$30—30 cents; not over \$40—40 cents; not over \$50—50 cents; Canada, not over \$100—\$1.

1899

2nd Month,



1899

28 Days.

MOON'S PHASES.

© Last Quarter 3d. 0h. 24m. A.
 ☽ New Moon 10d. 4h. 31m. M.

© First Quarter 17d. 3h 52m. M.
 ☽ Full Moon... 25d. 9h. 16m. M.

Feb. 5th—Day's Length: 10 hours, 18 minutes.

Day of Year.	Day of Month.	Day of Week.	Sun at Noon Mark.	CALENDAR FOR NEW YORK CITY, PHILADELPHIA, Pennsylvania, Connecticut, New Jersey, Ohio, Indiana and Illinois.								
				Sun Rises			Sun Sets.			Moon Rises		
				H.	M.	S.		H.	M.		H.	M.
32	1	W	12 13 50	7	10		5	18		11 22		5 5
33	2	Th	12 13 57	7	9		5	19		morn		5 47
34	3	Fr	12 14 4	7	8		5	20		29		6 34
35	4	Sa	12 14 10	7	7		5	22		1 38		7 30
36	5	6	12 14 14	7	6		5	23		2 47		8 41
37	6	M	12 14 19	7	5		5	24		3 52		9 58
38	7	Tu	12 14 22	7	4		5	25		4 48		11 10
39	8	W	12 14 24	7	3		5	26		5 36		ev 16
40	9	Th	12 14 26	7	1		5	28		6 17		1 9
41	10	Fr	12 14 27	7	0		5	29		sets		1 56
42	11	Sa	12 14 27	6	59		5	30		7 31		2 43
43	12	7	12 14 27	6	58		5	31		8 43		3 29
44	13	M	12 14 25	6	56		5	32		9 53		4 13
45	14	Tu	12 14 23	6	55		5	34		11 3		4 59
46	15	W	12 14 20	6	54		5	35		morn		5 44
47	16	Th	12 14 17	6	52		5	36		9		6 32
48	17	Fr	12 14 12	6	51		5	37		1 12		7 24
49	18	Sa	12 14 7	6	50		5	38		2 11		8 26
50	19	8	12 14 1	6	48		5	40		3 2		9 29
51	20	M	12 13 55	6	47		5	41		3 49		10 27
52	21	Tu	12 13 48	6	46		5	42		4 30		11 21
53	22	W	12 13 40	6	44		5	43		5 4		morn
54	23	Th	12 13 32	6	43		5	44		5 33		8
55	24	Fr	12 13 23	6	41		5	45		5 59		49
56	25	Sa	12 13 13	6	40		5	47		rises		1 24
57	26	9	12 13 3	6	38		5	48		7 10		2 1
58	27	M	12 12 52	6	36		5	49		8 12		2 38
59	28	Tu	12 12 41	6	35		5	50		9 15		3 16

Conjectures of the Weather.

The 1st—3rd, clear and cold ; 4th—6th, changeable ; 7th, 8th, snow ;
 9th—11th, clear and pleasant ; 12th—14th, variable ; 15th, 16th, snow ;
 17th, 18th, clear and cold ; 19th—21st, cloudy ; 22nd—24th, clear and cold ;
 25th, 26th, changeable ; 27th, 28th, cold.

FERTILIZERS.

Fertilizers, for which much money is paid out on many farms more than need be, or rather the money that is spent for fertilizers is not spent judiciously. Where stock is kept and considerable barn yard manure made, it is ordinarily not necessary to buy fertilizers containing nitrogen, because, by frequent rotation of crops and a clover sod plowed down, there will be sufficient of this element. And be it remembered that in a ton of fertilizer, costing, say \$33.00 one third can be saved by omitting the nitrogen and retaining only the potash and phosphates. That is for \$22.00, instead of \$33.00, you can get what your soil needs to produce the crop. And in some sections the soil does not call for potash, having this element supplied by nature in exhaustless quantities. Most soils need phosphate, and it is rare that one can buy too much of this. We do not believe that farmers buy too much commercial fertilizers, but some do not buy wisely, and this is a source of untold waste in our agriculture. See, therefore, that the home supply of manure is as large as it is possible to make it; grow clover freely, feed it to the horses, cows, hogs, sheep and chickens, and every year plow down one sixth of the farm of clover sod; quit buying so much costly nitrogen; experiment with potash to see if your soil needs it. Thus you may save many dollars that now go to waste.

CARE OF CANARY BIRDS.

Hang the cage where the draughts do not strike the bird. Give canary and rape seed, plenty of fresh water, cuttle fish bone, and clean gravel on the bottom of the cage often. Also give the birds fresh water to bathe in every day. After they have bathed, remove the dish, which should be shallow.

The room should not be overheated. Do not give them cake or sugar. When moulting, feed them on rape seed slightly moistened. Hard boiled egg and crackers grated are excellent. Bad seeds will kill birds. Cabbage and sweet apples are good for them, now and then a fig. Plantain seed is also wholesome food for them, and they are extravagantly fond of it, often eating that when rejecting most other kinds of food. When going out for a walk be sure to gather a sprig for your pet, and before frost gather and dry some for winter use.

With moderate care, your little songster will repay your attention with sweet notes of joy.

Clean the pigeon quarters thoroughly and whitewash. Dust the birds two or three times with fresh Dalmatian insect powder. The food should consist of the various grains and millet seed, with a salt codfish hung up for them to pick.

Leaves make the best kind of bedding and are an important addition to the manure heap. When used in the stalls during very cold weather, they prevent draughts of air along the floors and retain warmth. They cost nothing but the labor of raking and hauling and a large supply should be stored away for winter use under cover, so as to have them dry.

Cabbages can be kept by wrapping them in paper and packing in barrels and kept in a cool cellar. They will not dry out or decay as when placed in the cellar without protection.

1899

3rd Month,



1899

31 Days.

MOON'S PHASES.

© Last Quarter 4d. 11h. 6m. A. | © First Quarter 18d. 10h. 24m. A.
 ☽ New Moon 11d. 2h. 52m. A. | ☽ Full Moon 27d. 1h. 18m. M.

Mar. 5th—Day's Length: 11 hours, 28 minutes.

Day of Year	Day of Month	Day of Week	Sun at Noon			CALENDAR FOR			
			Mar.	H.	M.	Sun Rises.	Sun Sets.	Moon Rises.	High Water
				H.	M.	H.	M.	Philadelphia.	
60	1	W	12	12	29	6 35	5 53	10 20	3 57
61	2	Th	12	12	17	6 34	5 53	11 27	4 40
62	3	Fr	12	12	4	6 32	5 54	morn	5 28
63	4	Sa	12	11	51	6 30	5 55	35	6 20
64	5	10	12	11	37	6 29	5 56	1 39	7 19
65	6	M	12	11	23	6 27	5 57	2 38	8 30
66	7	Tu	12	11	9	6 25	5 58	3 28	9 45
67	8	W	12	10	54	6 24	5 59	4 10	10 53
68	9	Th	12	10	39	6 22	6 0	4 45	11 53
69	10	Fr	12	10	23	6 20	6 1	5 19	ev 43
70	11	Sa	12	10	7	6 19	6 2	5 48	1 29
71	12	11	12	9	51	6 17	6 3	sets	2 14
72	13	M	12	9	35	6 16	6 4	8 40	2 59
73	14	Tu	12	9	18	6 14	6 5	9 49	3 44
74	15	W	12	9	1	6 12	6 6	10 55	4 31
75	16	Th	12	8	44	6 11	6 8	11 57	5 19
76	17	Fr	12	8	27	6 9	6 9	morn	6 7
77	18	Sa	12	8	9	6 7	6 10	54	6 57
78	19	12	12	7	51	6 6	6 11	1 44	7 53
79	20	M	12	7	33	6 4	6 12	2 27	8 43
80	21	Tu	12	7	15	6 2	6 13	3 3	9 48
81	22	W	12	6	57	6 1	6 14	3 33	10 40
82	23	Th	12	6	39	5 59	6 15	4 2	11 39
83	24	Fr	12	6	20	5 58	6 16	4 28	morn
84	25	Sa	12	6	2	5 56	6 17	4 51	13
85	26	13	12	5	43	5 54	6 18	5 15	52
86	27	M	12	5	25	5 52	6 19	rises	1 27
87	28	Tu	12	5	6	5 51	6 20	8 12	2 8
88	29	W	12	4	48	5 49	6 21	9 21	2 50
89	30	Th	12	4	30	5 47	6 22	10 28	3 36
90	31	Fr	12	4	11	5 46	6 23	11 33	4 25

Conjectures of the Weather.

The 1st—3rd, clear and windy; 4th—6th, cold and snow; 7th, 8th, clear and cold;

9th—11th, changeable; 12th—14th, cold and blustery; 15th, 16th, pleasant;

17th, 18th, cloudy and rain; 19th—21st, variable; 22nd—24th, pleasant;

25th—26th, changeable; 27th—28th, cool and fair; 29th—31st, cool.

USEFUL TABLES.

TABLE SHOWING THE WEIGHT OF VARIOUS ARTICLES.

Barley	per bushel, 48 lbs.
Beans	per bushel, 60 lbs.
Buckwheat	per bushel, 48 lbs.
Broom Corn	per bushel, 46 lbs.
Blue Grass	per bushel, 14 lbs.
Clover Seed	per bushel, 60 lbs.
Corn, shelled	per bushel, 56 lbs.
Corn, on the ear	per bushel, 70 lbs.
Flax Seed	per bushel, 56 lbs.
Hemp Seed	per bushel, 40 lbs.
Hungarian Grass Seed	per bushel, 48 lbs.
Millet	per bushel, 50 lbs.
German Millet	per bushel, 50 lbs.
Oats	per bushel, 32 lbs.
Onions	per bushel, 57 lbs.
Osage Orange	per bushel, 33 lbs.
Orchard Grass	per bushel, 12 lbs.
Peas	per bushel, 60 lbs.
Potatoes, Irish	per bushel, 60 lbs.
Red Top Seed	per bushel, 10 lbs.
Rye	per bushel, 56 lbs.
Sweet Potatoes	per bushel, 55 lbs.
Timothy Seed	per bushel, 45 lbs.
Top Onions	per bushel, 28 lbs.
Turnips	per bushel, 55 lbs.
Wheat	per bushel, 60 lbs.

QUANTITY OF SEED USUALLY SOWN UPON AN ACRE.

Barley, broadcast	2 to 3 bushels
Beans, Dwarf, in Drills	1½ bushels
Beans, Pole, in hills	10 to 12 quarts
Beets, in drills	5 to 6 pounds
Broom Corn, in hills	8 to 10 quarts
Buckwheat	1 bushel
Cabbage in beds to transplant	½ pound
Carrots in drills	3 to 4 pounds
Chinese Sugar Cane	12 quarts
Corn, in hills	8 to 10 quarts
Corn, for soiling	3 bushels
Cucumber, in hills	2 pounds
Flax, broadcast	1½ bushels
Hemp	1½ bushels
Mustard, broadcast	½ bushel
Melon, Musk, in hills	2 to 3 pounds
Melon, Water, in hills	4 to 5 pounds
Oats, broadcast	2 to 3 bushels
Onion, in drills	5 to 6 pounds

Onion, for sets in drills	30 pounds
Onion sets, in drills	6 to 12 bushels
Parsnips, in drills	4 to 6 pounds
Peas, in drills	1½ bushels
Peas, broadcast	3 bushels
Potatoes, cut tubers	10 bushels
Pumpkin, in hills	4 to 6 pounds
Radish, in drills	8 to 10 pounds
Rye, broadcast	1½ to 2 bushels
Sage, in drills	8 to 10 pounds
Salsify, in drills	8 to 10 pounds
Spinach, in drills	10 to 12 pounds
Squash, bush varieties in hills	4 to 6 pounds
Squash, Run'g " in hills	3 to 4 pounds
Tomato, to transplant	½ pound,
Turnip, in drills	½ to 2 pounds
Turnip, broadcast	3 to 4 pounds
Vetches, broadcast	2 to 3 bushels
Wheat, broadcast	1½ to 2 bushels

GRASS SEEDS TO THE ACRE.

White Clover	10 pounds
Red Clover	10 to 15 pounds
Lucerne Clover	10 to 15 pounds
Alsike Clover	4 to 6 pounds
Timothy	12 pounds
Hungarian Grass	1 bushel

Blue Grass	1½ to 3 bushels
Rye Grass	1½ to 2 bushels
Orchard Grass	1½ to 2 bushels
Red Top Grass	1½ to 2 bushels
Mixed Lawn Grass	2 to 3 bushels
Millet	1 bushel

NUMBER OF PLANTS TO THE ACRE.

DISTANCE APART.	NO. OF PLANTS.
1 foot by 1 foot	43,560
1½ " 1½ "	19,360
2 " 1 "	21,780
2 " 2 "	10,890
2½ " 2½ "	6,969
3 " 2 "	7,260
3 " 3 "	4,840
4 " 4 "	2,722
5 " 5 "	1,742

DISTANCE APART.	NO. OF PLANTS.
6 feet by 6 feet	1,210
8 " 8 "	680
10 " 10 "	435
12 " 12 "	302
15 " 15 "	193
18 " 18 "	134
20 " 20 "	103
25 " 25 "	70
30 " 30 "	84

NUMBER OF PLANTS PRODUCED FROM AN OUNCE OF SEED.

	PLANTS.
Asparagus	about 500
Broccoli	" 2,000
Cabbage	" 2,000
Cauliflower	" 2,000
Celery	" 3,000
Egg Plant	" 1,000
Endive	" 3,000

	PLANTS.
Kale	about 2,000
Leek	" 1,000
Lettuce	" 3,000
Pepper	" 2,000
Tomato	" 3,000
Sage	" 1,000
Thyme	" 5,000

1899

4th Month,



1899

30 Days.

MOON'S PHASES.

© Last Quarter 3d. 6h. 55m. M.
 ② New Moon 10d. 1h. 21m. M.

© First Quarter 17d. 5h 43m. A.
 ☺ Full Moon..... 25d. 2h. 22m. A.

Apr. 2nd—Day's Length: 12 hours, 42 minutes.

Day of Year	Day of Month	Day of Week	Sun at Noon Mark.	CALENDAR FOR			
				Sun Rises	Sun Sets.	Moon Rises	High Water Philadelphia
91	1	Sa	12 3 53	5 44	6 24	morn	5 18
92	2	14	12 3 35	5 42	6 26	32	6 12
93	3	M	12 3 17	5 41	6 27	1 23	7 11
94	4	Tu	12 3 0	5 39	6 28	2 8	8 18
95	5	W	12 2 42	5 37	6 29	2 44	9 25
96	6	Th	12 2 25	5 36	6 30	3 17	10 28
97	7	Fr	12 2 8	5 34	6 31	3 47	11 27
98	8	Sa	12 1 51	5 33	6 32	4 16	ev 19
99	9	15	12 1 34	5 31	6 33	4 45	1 4
100	10	M	12 1 18	5 30	6 34	sets	1 46
101	11	Tu	12 1 2	5 28	6 35	8 35	2 33
102	12	W	12 0 44	5 26	6 36	9 41	3 20
103	13	Th	12 0 30	5 25	6 37	10 39	4 7
104	14	Fr	12 0 15	5 24	6 38	11 34	4 55
105	15	Sa	12 0 0	5 22	6 39	morn	5 41
106	16	16	11 59 56	5 20	6 40	20	6 27
107	17	M	11 59 32	5 19	6 41	1 0	7 15
108	18	Tu	11 59 18	5 17	6 42	1 33	8 7
109	19	W	11 59 4	5 16	6 43	2 3	9 0
110	20	Th	11 58 51	5 14	6 44	2 28	9 52
111	21	Fr	11 58 39	5 13	6 45	2 52	10 41
112	22	Sa	11 58 27	5 11	6 46	3 16	11 30
113	23	17	11 58 15	5 10	6 47	3 41	morn
114	24	M	11 58 4	5 8	6 48	4 7	17
115	25	Tu	11 57 53	5 7	6 49	rises	1 1
116	26	W	11 57 43	5 6	6 50	8 15	1 43
117	27	Th	11 57 33	5 4	6 51	9 23	2 32
118	28	Fr	11 57 23	5 3	6 52	10 26	3 23
119	29	Sa	11 57 15	5 2	6 53	11 20	4 16
120	30	18	11 57 7	5 0	6 55	morn	5 11

Conjectures of the Weather.

The 1st—3rd, clear and pleasant; 4th—6th, cloudy and showers; 7th, 8th, clear and warm; 9th—11th, variable; 12th—14th, thunder; 15th, 16th, pleasant; 17th, 18th, showers; 19th—21st, changeable; 22nd—24th, thunder; 25th, 26th, warm; 27th, 28th, changeable; 29th—30th, pleasant.

POSSIBILITIES OF THE SUN FLOWER.

THE MANY PROFITABLE USES TO WHICH IT MAY BE PUT.

The facts adduced ought to be of no little interest to the farmers. The plant is easily grown and rarely fails to produce a good crop. One of the most important uses for Sunflower seed is as food for poultry and cattle. Nothing makes poultry fatten quicker or causes hens to lay better, it is said. Experiments now in progress show that as food for cattle Sun Flower seeds have produced very satisfactory results. Remarkable success has been obtained by mixing the seed with barley and oats for cattle. In Russia, millions of pounds of sunflower seeds are raised annually for the oil that can be abstracted. It is used by painters for inside work, although it is not equal to linseed oil. About fifty bushels of seed can be produced on one acre of land, with oil selling at \$1. a gallon the profits ought to be large, where the oil is purified many consider it better than the ordinary grades of olive and almond oils for table use. At a recent experiment in Baltimore the hotel men of that city said they prefered it to all other oils for salads. France, Germany and Italy are enlarging their plants for making all kinds of seed oils, and among these the Sunflower seed is conspicuous. The stocks of the Sunflower can be used to advantage as fuel. An acre of sunflowers will produce a great many cords of good fuel. These are only some of the many uses to which this well known plant is being put, it will pay our farmers to give more attention to the Sunflower.

From The New York Evening Post.

WHITE CLOVER.

If there is one plant more than any other which the farmer should take to his heart and cherish, it is white clover. It is an excellent pasture plant, and we want pasture plants more than any thing else. It is a good hay plant, especially when growing with grass, affording a thick, close bottom, which greatly adds to the yield of hay. It springs up from its creeping perennial root at once after cutting, and its roots run out even the dreaded Canada thistle and fills up vacant spaces among the grass. When it is treated as it deserves, and is top-dressed with plaster, superphosphate, or manure it will thrive abundantly and make a growth which will surprise those who never thought of it except as a weed to be despised. It is called Dutch clover, and this is a great credit to it, for we know nothing but good of everything we have of Dutch origin, including Dutch farmers, who, among their especial peculiarities, think very highly of white clover.

CLEAN THE POULTRY HOUSE.

GIVE IT A GOOD GOING OVER BEFORE WINTER SETS IN.

Before Going to their winter quarters the chickens should all be turned out of the poultry house, and a thorough cleaning and renovating of the place should be attempted. It is in the winter time that eggs bring their high prices, and the fowls that can be induced to lay heavily then will be more then profitable. They can only do this, however, when clean, sanitary poultry houses are fitted up for their comfort. Fall cleaning of the houses is more essential than the spring, for the filth and dirt that are left in the house in the winter must be shut up in tight places so that it will tend to breed disease. Worms, maggots and lice will thrive in this filth, which is kept warmer than the outside air. They will soon swarm about the interior in great numbers, and naturally worry the life out of the chickens. In addition to this, the chickens will have to breathe the foul air that emanates from the gases of this filth. This alone is sufficient to cause sickness and death.

1899

5th Month,



1899

31 Days.

MOON'S PHASES.

© Last Quarter	2d. 0h. 45m A.	© First Quarter	17d. 0h. 13m A.
㉙ New Moon	9d. 0h. 38m. A.	㉛ Full Moon	25d. 0h. 49m. M.
Last Quarter.....		31d. 5h. 54m. A.	

May 7th—Day's Length: 14 hours, 7 minutes.

Day of Year.	Day of Month.	Day of Week.	Sun at Noon Mark.	CALENDAR FOR			
				Sun Rises.	Sun Sets.	Moon Rises.	High Water Philadelphia.
121	1	M	11 56 59	4 59	6 56	6	6 3
122	2	Tu	11 56 52	4 58	6 57	44	6 57
123	3	W	11 56 45	4 56	6 58	1 19	7 56
124	4	Th	11 56 39	4 55	6 59	1 49	8 59
125	5	Fr	11 56 34	4 54	7 0	2 17	9 59
126	6	Sa	11 56 29	4 53	7 1	2 44	10 56
127	7	19	11 56 25	4 52	7 2	3 15	11 50
128	8	M	11 56 21	4 51	7 3	3 47	ev 40
129	9	Tu	11 56 18	4 49	7 4	4 24	1 24
130	10	W	11 56 15	4 48	7 5	sets	2 11
131	11	Th	11 56 13	4 47	7 6	9 24	2 58
132	12	Fr	11 56 12	4 46	7 7	10 12	3 44
133	13	Su	11 56 11	4 45	7 8	10 55	4 29
134	14	20	11 56 11	4 44	7 9	11 31	5 13
135	15	M	11 56 11	4 43	7 10	morn	5 55
136	16	Tu	11 56 12	4 42	7 11	2	6 36
137	17	W	11 56 14	4 41	7 12	30	7 19
138	18	Th	11 56 16	4 40	7 13	54	8 7
139	19	Fr	11 56 18	4 39	7 14	1 18	9 0
140	20	Sa	11 56 21	4 39	7 15	1 42	9 54
141	21	21	11 56 25	4 38	7 16	2 7	10 48
142	22	M	11 56 29	4 37	7 17	2 35	11 43
143	23	Tu	11 56 33	4 36	7 18	3 7	morn
144	24	W	11 56 33	4 36	7 19	3 47	37
145	25	Th	11 56 44	4 35	7 20	rises	1 25
146	26	Fr	11 56 50	4 34	7 20	9 12	2 20
147	27	Sa	11 56 56	4 34	7 21	10 3	3 14
148	28	22	11 57 4	4 33	7 22	10 44	4 7
149	29	M	11 57 11	4 32	7 23	11 21	5 0
150	30	Tu	11 57 19	4 32	7 23	11 52	5 48
151	31	W	11 57 27	4 31	7 24	morn	6 37

Conjectures of the Weather.

The 1st—3rd, clear and warm; 4th—6th, showers; 7th, 8th, changeable; 9th—11th, clear and balmy; 12th—14th, warm and thunder; 15th, 16th, cloudy and rain; 17th, 18th, pleasant; 19th—21st, variable; 22nd—24th, thunder; 25th—26th, fair; 27th—28th, changeable; 29th—31st, pleasant.

Table for Foretelling the Weather through all the Changes of the Moon.

The following Table and remarks originally made by Herschel, the astronomer, are the result of many years' close observation; the whole being a due consideration of the attraction of the sun and moon, in their several positions respecting the earth, and will, by inspection, show the observer what kind of weather will *most probably* follow the entrance of the moon into any of its quarters. It has seldom been found to fail.

Moon	TIME OF CHANGE.	IN SUMMER.	IN WINTER.
BETWEEN			
	Midnight and 2 A. M....	Fair.....	Hard frost, unless wind S. or W.
	2 and 4 A. M.....	Cold, with frequent showers.....	..... Snow and Stormy
	4 and 6 A. M.....	Rain.....	..... Rain
	6 and 8 A. M.....	Wind and Rain.....	..... Stormy
	8 and 10 A. M.....	Changeable.....	Cold rain if wind W. snow if E.
	10 and 12 A. M.	Frequent Showers.....	..... Cold and high wind
	12 noon and 2 P. M.....	Very Rainy.....	..... Snow or rain
	2 and 4 P. M.....	Changeable.....	..... Fair and mild
	4 and 6 P. M.....	Fair.....	..... Fair
	6 and 8 P. M. {	Fair, if wind N. W.....	Fair & frosty, if wind N. or N.E.
		Rainy, if South or S. W.....	..... Rain or snow, if S. or S.W.
	8 and 10 P. M.....	Rain , if wind South or S. W	..... Rain or Snow if S. or S. W.
	10 and midnight.....	Fair.....	..... Fair and frosty

REMARKS.

The nearer the time of the moon's changes, first quarter, full or last quarter are to *midnight*, the fairer will the weather be during the following seven days.

2. The space for this calculation occupies from ten o'clock at night until two o'clock the next morning.

3. The nearer to *mid-day* or *noon* the phases of the moon happen, the more foul or wet weather may be expected during the next seven days.

4. The space of this calculation occupies from ten o'clock in the forenoon to two in the afternoon. These observations refer principally to the summer, though they affect spring and autumn nearly in the same ratio.

HOW TO JUDGE THE WEATHER BY THE SKY.

The colors of the sky at different times afford wonderfully good guidance. Not only does a bright sunset presage fair weather, but there are other tints which speak with clearness and accuracy. A bright yellow in the evening indicates wind; a pale yellow, wet; a natural grey color constitutes a favorable sign in the evening—an unfavorable one in the morning. The clouds are full of meaning in themselves. If they are soft, undefined and feathery, the weather will be fine; if the edges are hard, sharp and definite it will be foul. Generally speaking, any deep, unusual hues, betoken wind and rain; while the more quiet and delicate tints bespeak fair weather. Simple as these maxims are, the British Board of Trade has thought fit to publish them for the use of seafaring men.

1899

6th Month,



1899

30 Days.

MOON'S PHASES.

㉙ New Moon 8d. 1h. 20m. M. | ㉚ Full Moon 23d. 9h. 20m. M.
 ㉚ First Quarter 16d. 4h. 46m. M. | ㉚ Last Quarter 29d. 11h. 45m. A.

June 4th—Day's Length: 14 hours, 52 minutes.

Day of Year.	Day of Month.	Day of Week.	Sun at Noon Mark.	CALENDAR FOR NEW YORK CITY, PHILADELPHIA, Pennsylvania, Connecticut, New Jersey, Ohio Indiana and Illinois.							
				Sun Rises		Sun Sets		Moon Rises		High Water Philadelphia	
				H. M.	H. M.	W. M.	H. M.	H. M.	H. M.	H. M.	
152	1	Th		11 54 36	4 31	7 24		21		7 29	
153	2	Fr		11 57 46	4 30	7 25		48		8 27	
154	3	Sa		11 57 55	4 30	7 26		1 17		9 28	
155	4	23		11 58 5	4 30	7 26		1 48		10 27	
156	5	M		11 58 16	4 29	7 27		2 21		11 24	
157	6	Tu		11 58 27	4 29	7 28		3 0		ev 19	
158	7	W		11 58 28	4 29	7 28		3 46		1 6	
159	8	Th		11 58 49	4 29	7 29		sets		1 51	
160	9	Fr		11 59 1	4 28	7 30		8 52		2 33	
161	10	Sa		11 59 13	4 28	7 30		9 29		3 20	
162	11	24		11 59 25	4 28	7 31		10 2		4 0	
163	12	M		11 59 37	4 28	7 31		10 31		4 49	
164	13	Tu		11 59 49	4 28	7 32		10 56		5 20	
165	14	W		12 0 2	4 28	7 32		11 21		5 56	
166	15	Th		12 0 15	4 28	7 32		11 41		6 36	
167	16	Fr		12 0 27	4 28	7 33		morn		7 19	
168	17	Sa		12 0 40	4 28	7 33		8		8 11	
169	18	25		12 0 53	4 28	7 33		34		9 10	
170	19	M		12 1 6	4 28	7 34		1 4		10 12	
171	20	Tu		12 1 19	4 29	7 34		1 39		11 16	
172	21	W		12 1 32	4 29	7 34		2 23		morn	
173	22	Th		12 1 45	4 29	7 34		3 16		19	
174	23	Fr		12 1 58	4 29	7 34		rises		1 13	
175	24	Sa		12 2 10	4 29	7 35		8 39		2 8	
176	25	26		12 2 23	4 30	7 35		9 19		3 1	
177	26	M		12 2 33	4 30	7 35		9 55		3 52	
178	27	Tu		12 2 48	4 30	7 35		10 23		4 41	
179	28	W		12 3 0	4 31	7 35		10 51		5 28	
180	29	Th		12 3 12	4 31	7 35		11 21		6 13	
181	30	Fr		12 3 24	4 31	7 35		11 50		7 1	

Conjectures of the Weather.

The 1st—3rd, cloudy and showers; 4th—6th, clear and warm; 7th, 8th, variable; 9th—11th, pleasant; 12th—14th, warm and thunder; 15th, 16th, pleasant; 17th, 18th, thunder; 19th—21st, warm; 22nd—24th, changeable; 25th, 26th, warm; 27th, 28th, thunder; 29th—30th, changeable.

Cows vary greatly in their capacity for consuming food and in yield of milk. The amount of food given depends upon the kind. Twenty pounds of hay, or 40 pounds of ensilage with six quarts of ground grain is one ration, but some cows require much more. A cow that averages 10 quarts of milk per day during her milking period, and produces 4 pounds of butter per week, is above the general average; but individual cows have exceeded 40 quarts of milk per day and 30 pounds of butter per week. An ordinary cow will produce about a pound of butter from twelve quarts of milk. Much depends upon the amount of butter-fat in the milk, the milk of some cows containing as high as six per cent., while others will produce milk containing but two per cent. of butter fat.

Silage is much more digestible than drier food, and the animal eating it lays on fat faster; Milch cows give more and better milk; animals thrive upon it, and are more healthy. If turned among animals not thus fed, they can be selected without mistakes, a not unimportant fact is that they prefer silage to all other food.

There has arisen a struggle between the feeding value of silage and roots, and it is the most universal testimony that silage gives the best all round results. It is cheaper and contains more dry matter. Feeding upon it, cows give proportionately more milk, and they certainly gain more in weight.

Raising Squabs for the market is a paying business; they cost next to nothing, and bring large returns. See that they have warm quarters, well protected from the storms and from all marauders. If you start with a few young pigeons, they will need a little care and feeding of cracked grains for a few days.

Pigeons multiply prodigiously, and in the larger markets, especially in New York, they will bring twenty five cents each and higher price if young and plump. They raise and care for themselves. After the slaughter, wrap them singly in soft paper and pack in straw. The demand is never supplied.

There is a growing demand for ducks, either alive or dressed, and especially for dressed spring ducks; but for the average farmer it is better to hatch them in May and keep them for October market, at which time they bring nearly equally good prices.

Ducks begin laying when about eight months old, and keep it up for four or five months. They make a business of it. If so fortunate as to have a meadow with a clear stream of water running through it, the cost of raising these is practically nothing.

FORCING OR STARTING SEEDS IN THE HOUSE.

When it is desired to hasten the development of plants they may be sown in the conservatory or in boxes within the house. Those who have greenhouses hardly need directions, but for those who have had less experience we drop the following hints:

Procure shallow boxes, trays, or broad pots from two to four inches deep. The bottoms open for the free passage of water, else the earth will bake and become sour. Seeds will not germinate satisfactorily or thrive in a wet soil.

Prepare a mixture of one-third leaf-mould from the woods, cut fine, one-third clean sand, and one-third finely pulverized stable manure, moisten the mixture thoroughly, and fill into the boxes to within a half-inch of the top—gently patting down the surface to a level. Upon this distribute the seed, and cover just out of sight, by sifting over the seed the finest dust procurable, settling the seed down with a fine spray of water shaken from a brush, a heavier application baking the surface.

1899

JULY

1899

7th Month,



31 Days.

MOON'S PHASES.

㉙ New Moon 7d. 3h. 31m A | ㉚ Full Moon 22d. 4h. 41m A.
 ㉚ First Quarter 15d. 6h. 59m. A. | ㉚ Last Quarter 29d. 7h. 42m. M.

July 2nd —Day's Length: 14 hours, 56 minutes.

Day of Year.	Day of Month.	Day of Week.	Sun at Noon	Mar.	CALENDAR FOR			
					Sun Rises.	Sun Sets.	Moon Rises.	High Water Philadelphia
182	1	Sa	12	3	36	4 32	7 35	morn 7 56
183	2	27	12	3	47	4 32	7 35	8 59
184	3	M	12	3	59	4 33	7 34	1 0 10 1
185	4	Tu	12	4	9	4 33	7 34	1 43 11 2
186	5	W	12	4	20	4 34	7 34	2 31 ev. 0
187	6	Th	12	4	30	4 35	7 34	3 25 48
188	7	Fr	12	4	40	4 35	7 33	4 21 1 29
189	8	Sa	12	4	50	4 36	7 33	sets 2 12
190	9	28	12	4	59	4 37	7 33	8 33 2 50
191	10	M	12	5	8	4 37	7 32	8 59 3 29
192	11	Tu	12	5	16	4 38	7 32	9 25 4 6
193	12	W	12	5	24	4 39	7 31	9 47 4 42
194	13	Th	12	5	31	4 39	7 31	10 10 5 20
195	14	Fr	12	5	38	4 40	7 30	10 36 5 58
196	15	Sa	12	5	44	4 41	7 30	11 3 6 41
197	16	29	12	5	50	4 42	7 29	11 36 7 31
198	17	M	12	5	55	4 43	7 29	morn 8 35
199	18	Tu	12	6	0	4 44	7 28	14 9 45
200	19	W	12	6	4	4 44	7 27	1 1 10 56
201	20	Th	12	6	8	4 45	7 26	2 0 morn
202	21	Fr	12	6	11	4 46	7 26	3 8 3
203	22	Sa	12	6	13	4 47	7 25	rises 1 1
204	23	30	12	6	15	4 48	7 24	7 51 1 51
205	24	M	12	6	16	4 48	7 23	8 23 2 42
206	25	Tu	12	6	17	4 49	7 23	8 53 3 30
207	26	W	12	6	17	4 50	7 22	9 23 4 16
208	27	Th	12	6	17	4 51	7 21	9 53 5 3
209	28	Fr	12	6	16	4 52	7 20	10 26 5 48
210	29	Sa	12	6	14	4 53	7 19	11 2 6 37
211	30	31	12	6	12	4 54	7 18	11 42 7 30
212	31	M	12	6	9	4 55	7 17	morn 8 33

Conjectures of the Weather.

The 1st—3rd, showers; 4th—6th, clear and warm; 7th, 8th, rain and thunder; 1
 9th—11th, clear and balmy; 12th—14th, changeable; 15th, 16th, cloudy and rain;
 17th, 18th, pleasant; 19th—21st, variable; 22nd—24th, thunder;
 25th—26th, fair; 27th—28th, changeable; 29th—31st, sultry.

POULTRY.

Experience is a better teacher than precept in poultry raising, but it is not every one who turns his misfortune to experience. It is the wise poultry man who avoids making the same mistake twice; but there are those who will learn no less-sons from any source whatever.

If chicks roost upon narrow perches before their breasts become firm and hardened it is likely that they will have crooked breast bones. Therefore, while they are young, let them stick to their boxes, or have a coop without any poles.

Milk in any form is good for laying hens; it contains all the elements of egg food in almost the proper proportions; and no food will make hens lay like wheat in some shape, with a regular ration of green cut bones. Then keep them comfortable and busy.

The days are at hand when the early pullets and the hens which moulted first will begin their song of production, a song which is every music to the poultry-man. See that they have the combustible material to raise sufficient steam to keep the machinery at work and bring forth the product.

In the variety of farm products poultry may become a source of income at all seasons of the year; but, aside from this, the farmer should have more chickens to save the butcher's bills, and to afford him a change from pork and salt meats. We do not produce enough; the city markets are rapidly growing.

Ask the average farmer if he gives any time or attention to his poultry, and he will tell you, no; the women folks gather the eggs and raise a few young ones, but they do not pay. Of course, they do not, nor would the cattle, horses or pigs if looked after in the same slipshod manner; but they will never listen to your preaching.

Fowls need lime, but it is the better way to give them foods rich in this material. Chopped clover contains both lime and nitrogenous matter. Peas are also rich with it, and wheat is a lime food. The wheat should be given after clover, lest it be too concentrated, and fattens the fowls, instead of making them lay.

Old time ideas are hard to down, but it is waste of food keeping a cock with hens from which it is not desired to breed. They will lay and thrive better without his attentions, and sterile eggs will keep better than fertile ones, which fact is especially important if pickling is resorted to.

We shall not contend that a flock of poultry would be the salvation of the farmer in these depressed times, but when English farmers are convinced that there is more to be made from their fowls than the provision of pin money for their wives and daughters, it is time we were giving the subject more consideration.

Introduce new blood among the poultry at least once a year.

Give lime to hens for egg-shell material.

A little cayenne pepper in food often stimulates laying.

Corn is a fattening food, but should be given at night to the best advantage.

The best time to plow under a green crop is when it comes into full bloom. At maturity the plant does not decay so readily, nor yield up its store of plant food. Moreover, there will be less annoyance from plants springing up where the seed have not been allowed to ripen when thus early covered.

Hungarian and Millet, cut green before seeds form, make excellent hay for horses and cattle, and help out a short hay crop. It can be sown from May 1st, to August. Prepare the ground well and sow thick. It matures quickly, and should be cut green.

1899

8th Month,



1899

31 Days.

MOON'S PHASES.

㉙ New Moon ...	6d. 6h. 48m. M.	㉚ Full Moon.....	20d. 11h. 45m. A.
㉚ First Quarter.....	14d. 6h. 54m. M.	㉚ Last Quarter	27d. 6h. 57m. A.

Aug. 6th—Day's Length: 14 hours, 5 minutes.

Day of Year	Day of Month	Day of Week	Sun at Noon			CALENDAR FOR			
			H.	M.	S.	H. M.	H.	M.	H. M.
213	1	Tu	12	6	6	4 56	7 16	29	9 39
214	2	W	12	6	2	4 57	7 14	1 20	10 39
215	3	Th	12	5	58	4 58	7 13	2 15	11 35
216	4	Fr	12	5	53	4 59	7 12	3 13	ev 25
217	5	Sa	12	5	47	5 0	7 11	4 11	1 5
218	6	32	12	5	41	5 1	7 10	sets	1 41
219	7	M	12	5	34	5 2	7 9	7 29	2 19
220	8	Tu	12	5	26	5 3	7 7	7 53	2 55
221	9	W	12	5	18	5 4	7 6	8 16	3 31
222	10	Th	12	5	10	5 5	7 5	8 41	4 7
223	11	Fr	12	5	0	5 6	7 4	9 6	4 46
224	12	Sa	12	4	50	5 7	7 2	9 37	5 29
225	13	33	12	4	40	5 8	7 1	10 11	6 14
226	14	M	12	4	29	5 9	7 0	10 52	7 6
227	15	Tu	12	4	18	5 10	6 58	11 45	8 11
228	16	W	12	4	6	5 11	6 57	morn	9 25
229	17	Th	12	3	53	5 12	6 55	47	10 38
230	18	Fr	12	3	40	5 13	6 54	1 56	11 45
231	19	Sa	12	3	26	5 14	6 53	3 13	morn
232	20	34	12	3	12	5 15	6 51	4 30	43
233	21	M	12	2	58	5 16	6 50	rises	1 29
234	22	Tu	12	2	42	5 17	6 48	7 22	2 18
235	23	W	12	2	27	5 17	6 47	7 53	3 5
236	24	Th	12	2	11	5 18	6 45	8 24	3 50
237	25	Fr	12	1	55	5 19	6 44	9 1	4 37
238	26	Sa	12	1	38	5 20	6 42	9 40	5 26
239	27	35	12	1	21	5 21	6 41	10 26	6 15
240	28	M	12	0	4	5 22	6 39	11 16	7 8
241	29	Tu	12	0	46	5 23	6 37	morn	8 7
242	30	W	12	0	28	5 24	6 36	11	9 11
243	31	Th	12	0	10	5 25	6 34	1 7	10 10

Conjectures of the Weather.

The 1st—3rd, cloudy and showers; 4th—6th, clear and warm; 7th, 8th, variable; 9th—11th, pleasant; 12th—14th, warm and thunder; 15th, 16th, warm and sultry; 17th, 18th, thunder; 19th—21st, sultry; 22nd—24th, changeable; 25th, 26th, fair; 27th, 28th, thunder; 29th—31st, pleasant.

Notice:—Corn husks contain 32% of digestible matter.

Corn stubble	66%	"	"
Blades	64%	"	"
Stover	55%	"	"

There is more digestible matter in the fodder from one acre than in the corn, and corn fodder or stover from one acre yields as much digestible product as two tons of timothy hay.

CAPACITY OF CISTERNS AND WELLS.

Table showing No. of barrels contained for each foot of depth.

Square Cistern.	Bbls.	Circular Cistern.	Bbls.
5 feet by 5 feet holds	5.92	5 feet in diameter holds	4.66
6 " " 6 " "	8.54	6 " " " "	8.54
7 " " 7 " "	11.63	7 " " " "	11.63
8 " " 8 " "	15.19	8 " " " "	15.19
9 " " 9 " "	19.39	9 " " " "	19.39
10 " " 10 " "	23.74	10 " " " "	23.74

31½ Gallons 1 Barrel.

The husbandman should reflect that when he has succeeded in rearing and supporting an ordinary sized American family upon a farm, he has accomplished a great work; he has achieved greater results than a majority of those engaged in other pursuits. His garden, hennery, apiary and cow have kept him in food and happiness. Why shoud he ever groan?

Abundant food supports the animal, but will never make a good cow out of a small milker, and there is no use wasting effort. The character or temperament of a cow can not be changed; if poor in kind she can never be made a good dairy animal any more than can a roadster be made from a cart horse.

Fresh eggs:—Eggs may be kept fresh, longer with the small end downwards than in any other position, because in this way the yolk is suspended in the albumen and enveloped by it, whereas if placed for any time otherwise, the yolk would come in contact with the shell and decomposition would result.

WHERE PLANTS ORIGINATED.

Name.	Country of Origin.	Name.	Country of Origin.
Apple,	Europe,	Peach,	Persia.
Celery,	Northern Europe,	Pear,	Europe.
Chestnut,	Italy,	Peas,	Egypt.
Citron,	Greece,	Pine,	America.
Cucumber,	East Indies,	Poppy,	The East.
Garden-cress,	Egypt,	Potato,	America.
Horse-chestnut	Thibet,	Quince,	Island of Crete.
Horse-radish,	Southern Europe,	Radish,	China and Japan.
Mulberry Tree,	Persia,	Rye,	Siberia.
Nettle,	Europe,	Spinach,	Arabia.
Oats,	North Africa,	Sunflower,	Peru.
Onion,	Egypt,	Tobacco,	America.
Parsley,	Sardinia,	Walnut,	Persia.

1899

9th Month,



1899

30 Days.

MOON'S PHASES.

© New Moon..... 4d. 10h. 33m. A. | © Full Moon..... 19d. 7h. 31m. M.
 © First Quarter..... 12d. 4h. 49m. A. | © Last Quarter..... 26d. 10h. 2m. M.

Sept. 3rd—Day's Length: 12 hours, 59 minutes.

Day of Year	Day of Month	Day of Week	Sun at Noon Mar.	CALENDAR FOR NEW YORK CITY, PHILADELPHIA, Pennsylvania, Connecticut, New Jersey, Ohio Indiana and Illinois.							
				Sun Rises,		Sun Sets,		Moon Rises,		High Water Philadelphia	
				H.	M.	H.	M.	H.	M.	H.	M.
244	1	Fr	11 59 51	5 26	6 33	2	4	11	29		
245	2	Sa	11 59 32	5 27	6 31	3	4			morn	
246	3	36	11 59 13	5 28	6 29	4	2			14	
247	4	M	11 58 53	5 29	6 28	4	59			52	
248	5	Tu	11 58 34	5 30	6 26			sets		1 26	
249	6	W	11 58 14	5 31	6 25			6 46		2 2	
250	7	Th	11 57 53	5 32	6 23			7 11		2 39	
251	8	Fr	11 57 33	5 33	6 21			7 40		3 18	
252	9	Sa	11 57 13	5 34	6 20			8 14		3 59	
253	10	37	11 56 52	5 35	6 18			8 52		4 44	
254	11	M	11 56 32	5 36	6 16			9 40		5 31	
255	12	Tu	11 56 10	5 37	6 15			10 35		6 23	
256	13	W	11 55 49	5 38	6 13			11 40		7 22	
257	14	Th	11 55 28	5 39	6 11			morn		8 31	
258	15	Fr	11 55 7	5 40	6 9			51		9 43	
259	16	Sa	11 54 45	5 41	6 8			2 3		10 49	
260	17	38	11 54 24	5 42	6 6			3 20		11 51	
261	18	M	11 54 3	5 43	6 4			4 37		ev 43	
262	19	Tu	11 53 42	5 44	6 3			rises		1 29	
263	20	W	11 53 20	5 45	6 1			6 21		2 14	
264	21	Th	11 52 59	5 46	5 59			6 56		3 2	
265	22	Fr	11 52 38	5 47	5 58			7 35		3 51	
266	23	Sa	11 52 17	5 48	5 56			8 20		4 40	
267	24	39	11 51 56	5 49	5 54			9 10		5 30	
268	25	M	11 51 36	5 50	5 53			10 4		6 19	
269	26	Tu	11 51 15	5 51	5 52			11 0		7 10	
270	27	W	11 50 55	5 52	5 50			11 58		8 6	
271	28	Th	11 50 35	5 53	5 48			morn		9 4	
272	29	Fr	11 50 15	5 54	5 46			56		9 57	
273	30	Sa	11 49 56	5 54	5 44			1 55		10 46	

Conjectures of the Weather.

The 1st—3rd, changeable; 4th—6th, warm and sultry; 7th, 8th, variable;
 9th—11th, clear and balmy; 12th—14th, rain and thunder; 15th, 16th, cloudy and windy;
 17th, 18th, pleasant; 19th—21st, sultry; 22nd—24th, thunder;
 25th—26th, balmy; 27th—28th, warm; 29th—30th, sultry.

There is little danger that an overdose of Paris-green applied to potato vines could be so large as to work down into the soil and adhere to the potatoes when dug, to make the tubers dangerous.

Underdraining:—Surface water that flows off the land instead of passing through the soil, carries with it whatever fertilizing matter it may contain, and abstracts some from the earth. If it passes down through the soil to drain, the waste is arrested.

A farmer has the right to seize the turkeys that come upon his premises, notifying the owner and holding them until he pays for the amount of damage done by them and a reasonable amount for your trouble.

Charcoal:—Meat and Vegetables packed in charcoal will remain sweet and good; Casks charred on the inside will keep water pure. Tainted meat can be made sweet by being covered with it. Foul and stagnant water can be deprived of its bad taste by being filtered through it. It is a great decolorizer. Ale and porter filtered through it are deprived of their color. Animal charcoal, or bone black, is the best for such purposes.

SHORT METHOD FOR CACULATING INTEREST.

Multiply the principal by as many hundreds as there are days, and

For 4% divide by 90	For 8% divide by 45
" 5% " " 72	" 9% " " 40
" 6% " " 60	" 10% " " 36
" 7% " " 52	" 12% " " 30

Ice for domestic use should never be gathered from a source where the water before freezing was unfit for drinking purposes. Freezing does not eliminate its impurities. Typhoid fever germs, and probably of other diseases, may be imprisoned in ice. Be as guarded in the selection of ice as in the choice of water. Gather ice only from clear streams and ponds.

Mineral constituents absorbed or removed from the soil by the following crops:

	Wheat 25 Bus.	Barley 40 Bus.	Turnips 20 Tons	Hay 1½ Tons.
	LBS.	LBS.	LBS.	LBS.
Potassa,	29.6	17.5	47.1	38.2
Soda,	3.	5.2	8.2	12.
Lime,	12.9	17.	29.9	44.5
Magnesia,	10.6	9.2	19.7	7.1
Oxide of Iron,	2.6	2.1	7.1	.6
Phosphoric Acid,	20.6	25.8	46.3	15.1
Sulphuric Acid,	10.6	2.7	13.3	9.2
Chlorine,	2.	16.	3.6	4.1
Silica,	118.1	129.5	247.8	78.2
Alumina,		2.4		
Total,	210.00	213.00	423.00	209.00

Periods of Gestation: Guinea pig, 3 weeks; Sow, 16 weeks; Cat 8 weeks; Dog, 9 weeks; Lion, 5 months; Sheep, 5 months; Cow 9 months; Horse and Ass, 11 months; Buffalo and Camel, 12 months; Elephant, 23 months.

1899

10th Month,



1899

31 Days.

MOON'S PHASES.

☽ New Moon 4d. 2h. 14m. A. | ☽ Full Moon 18d. 5h. 4m. A.
 ☽ First Quarter 12d. 1h. 9m. M. | ☽ Last Quarter 26d. 4h. 40m. M.

Oct. 1st—Day's Length: 11 hours, 47 minutes.

Day of Year	Day of Month	Day of Week	Sun at Noon Mark.	CALENDAR FOR NEW YORK CITY, PHILADELPHIA, Pennsylvania, Connecticut, New Jersey, Ohio, Indiana and Illinois.										
				Sun Rises		Sun Sets.		Moon Rises		High Water Philadelphia				
				H.	M.	H.	M.	H.	M.	H.	M.			
274	1	40		11	49	37	5	56	5	43	2	53		
275	2	M		11	49	18	5	57	5	41	3	51		
276	3	Tu		11	48	59	5	58	5	39	4	49		
277	4	W		11	48	41	5	59	5	38	5	49		
278	5	Th		11	48	23	6	0	5	36	sets	1	31	
279	6	Fr		11	48	6	6	1	5	35	6	14	2	11
280	7	Sa		11	47	49	6	2	5	33	6	54	2	54
281	8	41		11	47	32	6	3	5	31	7	38	3	40
282	9	M		11	47	16	6	4	5	30	8	32	4	29
283	10	Tu		11	47	0	6	5	5	28	9	32	5	20
284	11	W		11	46	44	6	7	5	27	10	59	6	12
285	12	Th		11	46	29	6	8	5	25	11	49	7	9
286	13	Fr		11	46	15	6	9	5	23	morn	8	12	
287	14	Sa		11	46	1	6	10	5	22	1	2	9	19
288	15	42		11	45	48	6	11	5	20	2	16	10	23
289	16	M		11	45	35	6	12	5	19	3	28	11	22
290	17	Tu		11	45	23	6	13	5	17	4	22	ev	17
291	18	W		11	45	11	6	14	5	16	5	53	1	4
292	19	Th		11	45	0	6	15	5	14	rises	1	50	
293	20	Fr		11	44	50	6	16	5	13	6	12	2	40
294	21	Sa		11	44	40	6	18	5	12	7	0	3	29
295	22	43		11	44	31	6	19	5	10	7	53	4	17
296	23	M		11	44	22	6	20	5	9	8	50	5	6
297	24	Tu		11	44	15	6	21	5	7	9	46	5	52
298	25	W		11	44	8	6	22	5	6	10	46	6	38
299	26	Th		11	44	1	6	23	5	4	11	44	7	25
300	27	Fr		11	43	56	6	24	5	3	morn	8	15	
301	28	Sa		11	43	51	6	26	5	2	43	9	8	
302	29	44		11	43	47	6	27	5	1	1	41	9	58
303	30	M		11	43	41	6	28	4	59	2	43	10	47
304	31	Tu		11	43	42	6	29	4	58	3	38	11	35

Conjectures of the Weather.

The 1st—3rd, cloudy and rain; 4th—6th clear and pleasant; 7th—8th, variable; 9th—11th, warm and sultry; 12th—14th, changeable; 15th, 16th, warm and pleasant; 17th, 18th, stormy; 19th—21st, sultry; 22nd—24th, changeable; 25th, 26th, balmy; 27th, 28th, changeable; 29th, 31st, pleasant.

To get rid of flies:—Clusters of fragrant clover hung in the room and left to dry, sheds a faint fragrant perfume through the air, will drive away more flies than sticky saucers of molasses and other fly traps and fly papers can ever collect.

To remove an *obdurate screw*, apply a red-hot iron to the head for a short time, the screw-driver being applied immediately while the screw is hot.

A horse will live 25 days without solid food, merely drinking water; 17 days without either eating or drinking, and only 5 days when eating solid food without drinking.

To measure a bin for wheat, corn, potatoes etc., multiply together the length breadth and height to get the cubic feet. Divide the product by 56, and multiply the quotient by 45. The result shows the contents in bushels, struck measure. There are about four-fifths as many bushels as cubic feet in the contents of a bin, hence it will be sufficiently accurate to divide the product by 5, and multiply the quotient by 4. By this rule the contents can be known in a few minutes.

"A pint of mustard seed added to a barrel of cider will keep the liquid sweet or a long time."

The diameter of a barrel at the heads is 17 inches; bung 19 inches; length 28 inches; volume, 7689⁹c. inches.

A Cloth Cleaning Mixture:—Deodorized Benzine, one pint; Sulphuric Ether, half ounce; Chloroform two teaspoonfuls; Alcohol two ounces; white rose essence three teaspoonfuls; or any other essence to cover up the Benzine. Apply with black silk to dark goods, to neckties apply with white silk.

Incubation:—Temperature of hatching eggs is 104° F. Periods: Swan 42 days; Parrot 40 days, Goose and Pheasant, 35 days; Duck, Turkey and Peafowl, 28 days; Hens, 21 days; Pigeons, 14 days, Canary Birds, 14 days.

Food derived from tuberculosis animals, ascending to recent investigations, can produce tuberculosis matter in milk is exceptionally active in its operations upon animals fed either with the milk or with butter or cheese derived from it; and milk is undoubtedly the chief source of the tuberculosis which man derives from his food. A method of detecting them, by centrifugal rotation of milk-holding Bacilli, they will sink to the bottom, and by securing samples of this milk any capable microscapist can determine their presence. Momentary boiling is sufficient to remove the very dangerous quality of tuberculosis milk, although tuberculosis meat can only be rendered safe by very thorough cooking.

16% of cattle are afflicted with this disease. One pig in every 46 being attacked. Chickens eating sputum from consumptive persons generally die from tuberculosis, and its ravages in this direction are extensive.

A speedy method of testing for impurities of drinking water. Dissolve 12 grains of Caustic potash and 3 grains of Permauganate of potash in an ounce of distilled water, and add one or two drops of this to a tumbler of water. If a decided color is imparted, the water may be used, but it should be rejected as probably dangerous if the color immediately disappears.

All persons without any distinction as to nationality can take American Patents on the same terms as citizens.

1899

11th Month,



1899

30 Days.

MOON'S PHASES.

㉙ New Moon	3d. 5h. 26m M	㉚ Full Moon	17d. 5h. 18m M.
㉚ First Quarter.....	10d. 8h. 35m. M	㉚ Last Quarter	25d. 1h. 34m. M.

Nov. 5th—Day's Length: 10 hours, 19 minutes.

Day of Year.	Day of Month.	Day of Week.	Sun at Noon Mark.	CALENDAR FOR			
				Sun Rises.	Sun Sets.	Moon Rises.	High Water Philadelphia
305	1	W	11 43 4)	6 30	4 57	4 40	11 59
306	2	Th	11 43 39	6 31	4 56	5 42	ev 44
307	3	Fr	11 43 40	6 32	4 54	6 47	1 25
308	4	Sa	11 43 40	6 34	4 53	sets	2 12
309	5	45	11 43 42	6 35	4 52	6 27	3 2
310	6	M	11 43 45	6 36	4 51	7 25	3 52
311	7	Tu	11 43 48	6 37	4 50	8 31	4 43
312	8	W	11 43 52	6 38	4 49	9 42	5 36
313	9	Th	11 43 57	6 40	4 48	10 53	6 26
314	10	Fr	11 44 3	6 41	4 47	morn	7 19
315	11	Sa	11 44 10	6 42	4 46	4	8 19
316	12	46	11 44 17	6 43	4 45	1 14	9 22
317	13	M	11 44 26	6 44	4 44	2 24	10 22
318	14	Tu	11 44 35	6 46	4 43	3 35	11 22
319	15	W	11 44 45	6 47	4 42	4 46	morn
320	16	Th	11 44 56	6 48	4 41	5 56	18
321	17	Fr	11 45 7	6 49	4 40	rises	1 7
322	18	Sa	11 45 20	6 50	4 39	5 40	1 54
323	19	47	11 45 33	6 51	4 39	6 36	2 43
324	20	M	11 45 47	6 53	4 38	7 34	3 31
325	21	Tu	11 46 2	6 54	4 38	8 33	4 16
326	22	W	11 46 18	6 55	4 37	9 33	5 1
327	23	Th	11 46 34	6 56	4 36	10 32	5 41
328	24	Fr	11 46 52	6 57	4 36	11 30	6 22
329	25	Sa	11 47 10	6 58	4 35	morn	7 3
330	26	48	11 47 29	6 59	4 35	27	7 48
331	27	M	11 47 49	7 0	4 35	1 25	8 40
332	28	Tu	11 48 9	7 2	4 34	2 25	9 34
333	29	W	11 48 30	7 3	4 34	3 27	10 27
334	30	Th	11 48 52	7 4	4 34	4 30	11 22

Conjectures of the Weather.

The 1st—3rd, rain and cold; 4th—6th, clear and pleasant; 7th, 8th, variable; 9th—11th, clear and cool; 12th—14th, cloudy and snow; 15th, 16th, windy; 17th, 18th, pleasant; 19th—21st, changeable; 22nd—24th, clear and cold; 25th—26th, snow; 27th—28th, clear; 29th—30th, stormy.

Agriculture:—Besides feeding 70 millions of people, the U. S. furnishes 600 to 800 million dollars to help feed other countries. In the past 30 years it has created the wealth to pay 2000 million dollars of the public debt, and contributes more in payment of local, state and national taxation than any other industry. More work for more people than all other industries combined and the best market in the world for manufactures.

Common hydraulic cement mixed with oil, forms a good paint for roofs and out-buildings. It is water proof and incombustible.

Mortar of brickdust and quicklime is now recommended as an excellent and durable substitute for hydraulic cement.

Carbolic acid as a germicide when combined with oil takes 3 days to destroy them, Carbolized Vaseline one day, in Lanolin thirty minutes. Consequently disinfectants should be combined with Lanolin instead of with oil, Vaseline or other fats. In reality all medicines in the form of ointments should be rubbed up with Lanolin on account of its ready absorption by the skin.

POISON IVY & POISON SUMACH.

Commit to memory these four things to insure safety against our poison sumachs.

First.—The three leaf ivy is dangerous.

Second.—The five leaf is harmless.

Third.—The poison sumach has white berries.

Fourth.—No red berrie sumach is poisonous.

Both the poison ivy and the poison sumach, have similar white berries growing in small slender clusters from the axils of the leaves. All other sumachs the berries are red and in close bunches at the end of the branches, and are far from being dangerous.

With these simple precepts fixed in the mind, no one need fear the dangers of the thicket.

Corn fodder and corn ensilage have about the same digestibility for total dry matter and furnish equal amounts of energy. The fodder furnishes more digestible carbo-hydrates extract, but the ensilage slightly more of the other nutrients. as compared with cow-peas and soja-beans the corn fodder and ensilage have much a higher value for energy or fat production, but the cow-pea ensilage and the soja-beans, ensilage are more valuable for annual growth or the production of milk.

The annual value of Dairy products of the U. S. amount to about 450 million dollars. This is more than all our mining products, other than coal, oil and gas. There never has been an annual product of gold in any one year that could buy the dairy products of this country for the present year.

STRENGTH OF ICE.

Ice one and one-half inches thick will support a man; 4 inches thick will support cavalry; 5 inches thick will support an 84 pound cannon; 10 inches thick will support a multitude; 18 inches thick will support a railroad train.

CAPACITY OF BOXES.

A box 24 inches long by 16 wide and 28 inches deep will contain 5 bushels.

A box 14 inches wide, 23 and 1-5 inches long, 10 inches deep, will contain one and one-half bushels.

American's consume seven to eight thousand bushels corn per day making starch and grits, some Nebreska fields yield 80 bushels per acre.

The total export of *Apples* to Europe this season, 1.860.632 barrels.

1899

DECEMBER

1899

12th Month,



31 Days.

MOON'S PHASES.

㉙ New Moon 2d. 7h. 47m. A.	㉚ Full Moon..... 16d. 8h 31m. A.
㉚ First Quarter 9d. 4h. 2m. A.	㉚ Last Quarter 24d. 10h. 57m. A.

Dec. 3rd—Day's Length: 9 hours, 30 minutes.

Day of Year	Day of Month	Day of Week	Sun at Noon	Mark.	CALENDAR FOR								
					H.	M.	S.	H.	M.	Sun Sets.	H.	M.	Moon Rises	H. M.	High Water Philadelphia
335	1	Fr	11	49	15	7	5	4	34	5	37		morn
336	2	Sa	11	49	38	7	6	4	33	6	43		41
337	3	49	11	50	1	7	7	4	33	sets	1	32	
338	4	M	11	50	26	7	8	4	33	6	23		2 23
339	5	Tu	11	50	51	7	9	4	32	7	31		3 15
340	6	W	11	51	16	7	10	4	32	8	43		4 6
341	7	Th	11	51	42	7	11	4	32	9	55		4 56
342	8	Fr	11	52	9	7	12	4	32	11	6		5 41
343	9	Sa	11	52	35	7	13	4	32	morn			6 31
344	10	50	11	53	3	7	14	4	32	16			7 22
345	11	M	11	53	30	7	15	4	32	1	26		8 21
346	12	Tu	11	53	58	7	15	4	32	2	35		9 25
347	13	W	11	54	27	7	16	4	33	3	43		10 28
348	14	Th	11	54	55	7	16	4	33	4	50		11 29
349	15	Fr	11	55	24	7	17	4	33	5	54		ev 25
350	16	Sa	11	55	53	7	18	4	33	rises			1 13
351	17	51	11	56	23	7	18	4	33	5	20		1 58
352	18	M	11	56	52	7	19	4	34	6	18		2 43
353	19	Tu	11	57	22	7	20	4	34	7	21		3 26
354	20	W	11	57	52	7	20	4	35	8	20		4 7
355	21	Th	11	58	21	7	21	4	35	9	19		4 46
356	22	Fr	11	58	51	7	21	4	36	10	15		5 23
357	23	Sa	11	59	11	7	22	4	37	11	13		6 2
358	24	52	11	59	51	7	22	4	37	morn			6 40
359	25	M	12	0	21	7	23	4	38	11			7 24
360	26	Tu	12	0	51	7	23	4	39	1	10		8 16
361	27	W	12	1	21	7	23	4	39	2	13		9 17
362	28	Th	12	1	50	7	23	4	40	3	16		10 19
363	29	Fr	12	2	20	7	24	4	40	4	22		11 23
364	30	Sa	12	2	49	7	24	4	41	5	27	morn	
365	31	53	12	3	18	7	24	4	42	6	26		23

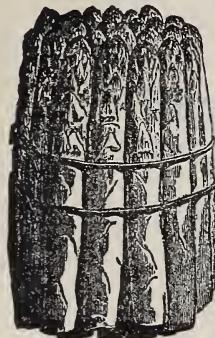
Conjectures of the Weather.

The 1st—3rd, cloudy and snow; 4th—6th, variable; 7th, 8th, clear and pleasant; 9th—11th, cold and snow; 12th—14th, changeable; 15th, 16th, stormy; 17th, 18th, changeable; 19th—21st, windy and snow; 22nd—24th, cold; 25th, 26th, blustery; 27th, 28th, clear; 29th—31st, snow.

ILLUSTRATED CATALOGUE

WITH
GENERAL DIRECTIONS FOR CULTIVATION.

The Terms and Prices of Vegetable Seeds will be found in the Retail Price List in last part of Catalogue.

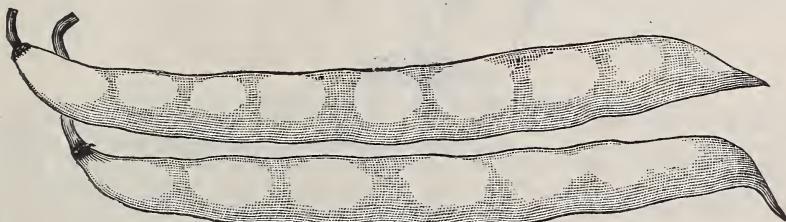


Conover's Colossal.

ASPARAGUS.

Soak the seed twenty-four hours in warm water, and sow in drills, one foot apart. When the plants are well up, thin to three or four inches in the row, and give frequent and thorough cultivation during the summer. The second season prepare a bed by deep spading or trenching, working in a large quantity of well rotted manure. Dig trenches four feet apart and twelve to sixteen inches deep, and spade in at least four inches of well rotted manure in the bottom. Set the plants in the trench eighteen inches apart, covering them with about two inches of fine soil. After the plants are up, gradually fill up the trenches, and give frequent and thorough cultivation. The second season, early in the spring, spade in a heavy dressing of manure and about two quarts of salt to the square rod. Cultivate well. The next season it may be cut for the table two or three times, taking care to cut *all* as fast as it appears. After the final cutting, spade in a liberal dressing of fine manure and sow one quart of salt to the square rod. The next season, and ever after that, the bed should give a full crop, but should be annually manured after the last cutting and well cultivated through the remainder of the summer. The tops should not be cut until *dead ripe*.

Conover's Colossal.—A mammoth variety of vigorous growth, sending up from fifteen to forty sprouts from one to two inches in diameter. Color deep green, and crown very close.



Golden Wax Bean.

Golden Wax Bean.—This bean has long been and still continues the standard wax variety for general use, and while many varieties have been introduced claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small white blossoms, pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short, fleshy, green point, cooking quickly as snaps, shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purple red.

BEANS—Dwarf, Bush, or Snap.

Under this head are classed all the low growing sorts. They are so extremely sensitive of frost and cold, that it is useless to plant them before the ground has become warm and light. Stir the ground often, but only when dry, because earth scattered on the leaves when they are wet with dew or rain, will cause them to rust, and greatly injure the crop.

Round Yellow Six Weeks.—One of the best green pod Beans, while this variety does not differ from the Early Yellow Kidney Six Weeks in size or general appearance of the vine, the pods are shorter, very much thicker, more fleshy, while retaining the vigor and hardiness of the old sort, it is fully one week earlier. Dry Bean, color of ordinary six weeks, but it is much shorter, almost round.

Early China Red Eye.—Early, and can be used either as a string or shelled Bean.



Improved Round Pod Valentine Bean.

EARLY ROUND POD IMPROVED RED VALENTINE BEANS.--For snaps there is nothing superior to this variety among the green podded sorts and many prefer it to the wax varieties. Vines erect, with coarse, dark green leaves, and large white blossoms; pods medium length, curved cylindrical, with crease in back, very fleshy, crisp and tender; beans medium size; long, irregular, pink, marbled with red. Among green podded varieties there is none, we think, that can compare with our stock of Valentines in fleshing and high quality of pod. Many different strains of Valentine are offered under varying names, each claiming to be a great and distinct improvement. We have examined them all, and have found none which we were willing to substitute for our old stock, which combines to a high degree all the good qualities of the sort.



Ivory Pod Wax Bean.



White Selected Wax Bean.

Ivory Pod Wax.—New variety, earlier than German Black Wax; long, stringless tender white pods of rich, creamy flavor.

Early Mohawk.—This sort is so much hardier than the others that it can be planted earlier and often in this way, will furnish beans fit for use before any other kind. Vines large, stout, with large coarse leaves which will stand a slight frost; blossoms large, purple; pods long straight, coarse, with long tapering point. Beans long, kidney shaped, variegated with drab-purple and brown.

Refugee, or Thousand to One.—Vines large, spreading, exceedingly hardy, with small, smooth leaves and large lilac flowers, very late, and esteemed for late planting and for use as pickles; pods long, cylindrical, green, becoming white, streaked with purple, of good quality as snaps; beans long, light-drab, dotted and splashed with purple.

German Wax, White Seeded.—Vines small, erect, with large, light-colored leaves and white blossoms, pods, short, broad, flat, white, fleshy and wax-like, of medium quality, but very handsome. Beans medium size, oval and white.

Wardwell's Kidney Wax.—The vines of this variety are very large, strong growing, but are peculiarly liable to blight; but when healthy, yields a large crop of long, nearly straight, handsome, very white and wax-like pod. They are of good quality and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney shaped, white with dark markings about the eye. Market gardeners find this a profitable variety owing to the large size and handsome color of the pods.

Currie's Rust Proof Wax.—This variety is claimed to be absolutely rust proof, and is as nearly rust proof as any good wax podded bean can be, vine vigorous and productive, about the same as Kidney Wax. Dry beans bluish-black.

German Wax Black Seeded.—We are so thoroughly satisfied with this improved strain of Black wax that we have discarded the old strains altogether, this being more vigorous growing, far more productive, with a longer, whiter, more fleshy pod and unsurpassed in flavor, vines medium sized, very vigorous and hardy, withstanding rust exceedingly well. Flowers reddish white or purple. Pods medium length, borne well up among the foliage, curved, cylindrical, thick, fleshy, and of a clear, waxy-white color, with long, slightly curved point; remain a long time in condition for use as snaps. Beans small, oblong, jet black. No one can afford to plant the old strain, as this is much better in every respect.

White Seeded Valentine.—All the characteristics of the Red Valentine, with white seeds.

Crystal White Wax.—New variety, long round pods, greenish white, transparent, stringless, crisp, tender and slow to harden.

German Wax (White Seeded). Ripe beans, clear white; large, handsome pods beautiful white wax color.

ROYAL DWARF WHITE KIDNEY—One of the best late kinds; as a winter bean it has no superior.

Large White Marrow.—Excellent quality, either shelled green or dry.

Dwarf, White Navy.—Seeds small, round and oval, used exclusively for field culture.

BEANS—Pole or Running.

These require a warm, mellow soil, and shou'd not be planted until settled, warm weather. Form hills three and a half feet apart, by forking in a shovelful of fine manure; set the poles and plant to six to eight beans, and after the beans commence to run, thin to four plants to the hill. Start any that fail to climb around the pole in the same direction as the others (they will go in no other.) Fasten by sticking the end in a cut notch in the pole.

Improved Extra Large Lima.—Very superior quality, seed much larger than the ordinary large Lima, of greenish tinge; tender and sweet.

Large Lima.—One of the best pole beans for use, shelled either green or dry.

Indian Chief, or Tall Wax.—Pods of a fine waxen semi-transparent White color, crisp, tender and succulent.

Small White Lima, Carolina.—Similar to large Lima in flavor, beans much smaller but more productive.

White Dutch Case Knife.—The earliest variety of Pole Bean, excellent flavor, and good green or dry.

Horticultural.—The old favorite, used green or dry. The dry beans are very superior for cooking.

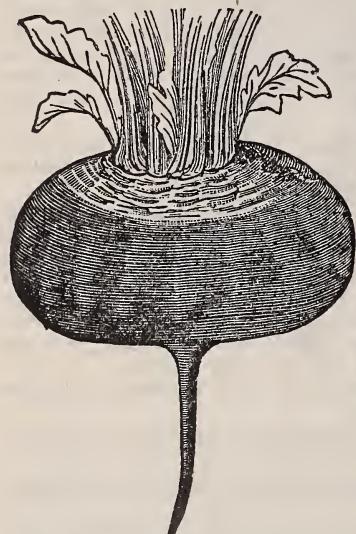
Giant Wax Red Seed.—Pods six to nine inches long, yellowish color, fleshy and tender.

BEET.

All the varieties succeed best on a deep, rich, sandy loam. For early beets, sow as soon as the ground will admit, in drills fourteen inches apart, and thin to six inches in the row. For winter, sow about the middle of spring. Soak the seed twenty-four hours in luke-warm water before planting, and sow in freshly prepared ground.

The Sugar and Mangel Wurzel varieties are grown for feeding stock and should be sown from April to June in drills two feet apart, and afterwards thinned out to stand one foot apart in the rows; keep them well cultivated and you will have an abundant crop.

Extra Early Bassano.—This is the largest of the Earliest varieties, and reaches a size fit for the table amongst the first; will not keep well during the winter. Flesh coarse grained, but tender and sweet.



Extra Early Egyptian Blood Turnip.

Extra Early Egyptian Blood Turnip.—This matures quicker than any other sort. Roots of fine form, medium size, smooth and dark in color, flesh dark red, fine grained, crisp and tender.

Early Blood Turnip.—Tops small, roots blood red, turnip shaped and very tender.

Bastian's Early Turnip.—One of the best for the market gardener or for family use, early, quick growth, good shape, and bright red color.

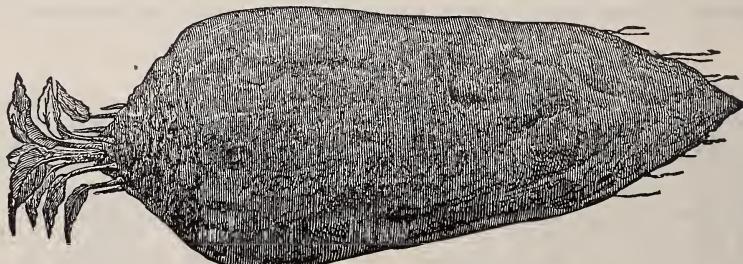
Half Long Blood.—One of the very best, unsurpassed for its winter keeping qualities.

Improved Long Dark Blood.—The best winter variety, but apt to be tough when sown too early.

Swiss Chard.—Tops used for Greens.

White Silesian Sugar.—Grown extensively for feeding stock; also for extraction of sugar.

Imperial White Sugar Beet.—A greatly improved variety of the White Silesian.

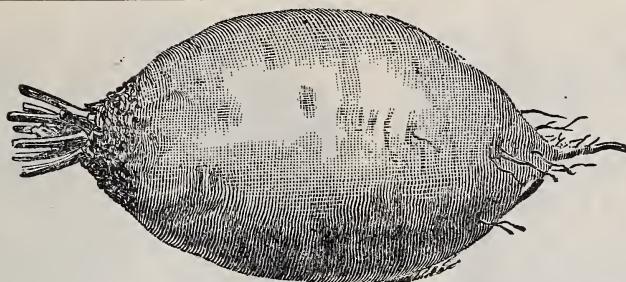


Giant Long Red Mangel Wurzel.

Giant Long Red Mangel Wurzel.—Very large, growing well out of the ground, top small for its size, straight, smooth, and of fine scarlet color.

Long Red Mangel Wurzel.—A large, long variety, for stock feeding, color light red.

Yellow Globe Mangel Wurzel.—Large, round, orange colored variety, of excellent quality, which keeps better than the long red, producing better crops on shallow soil.



Yellow Ovoid Mangel Wurzel.

Yellow Ovoid Mangel Wurzel.—Root ovoid, intermediate between the long and globe varieties, flesh solid, usually white, zoned with yellow; hardy, vigorous and productive. **Red Globe Mangel Wurzel.**—Similar to Yellow Globe, except in color, which is light red or pink.

BRUSSELS SPROUTS.

This is a very desirable vegetable, though very little known in this country. It grows two or three feet high and produces from the sides of the stock numerous little sprouts somewhat resembling cabbages; they are used for Fall and Winter Greens. It can only be grown to perfection in a good soil and with a long season to complete its growth. The seed should be sown in March or April, in a frame and transplant into the open ground and cultivate as cabbage. The plants should be watered and shaded for a week or ten days to give them a good start.

CABBAGE.

There is no vegetable which may be cultivated with more certainty of success than this, and few if any that are so generally useful, as it may be made to follow other crops, and will give *some* return, no matter how poor the soil or how negligent the cultivation, while it responds so readily to better care, that it claims a place in the finest garden, and the attention of the most skillful gardener.

The requisites for complete success *First*, good seed; there is no vegetable where the seed has more influence on the quality of the product than this, and the gardeners should invariably select the best procurable. *Second*, rich, well prepared ground. *Third*, frequent and thorough cultivation.

For Cabbages, the ground must be highly manured, deeply dug or ploughed, and thoroughly worked to insure good full sized heads. A heavy, moist and fresh loam is most suitable. The early sorts should be sown very early, in hot-beds, hardened off, and transplanted eighteen to twenty-four inches apart, early in the spring. In the south, sow from the middle of September to middle of October, and transplant into cold frames to preserve through winter, setting into open ground as early as possible. In transplanting, *they must be set in the ground up to the first leaf no matter how long the stem may be.*

All through the season the ground should be cultivated *as often as possible*, as success will depend largely upon faithfulness in this particular.

The late autumn winter varieties may be sown in a seed bed, from the middle to the last of spring, and transplanted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stems.

Cabbage should be hoed every week, and the ground stirred deeper as they advance in growth, drawing up a little earth to the plants each time, until they begin to head, when they should be well dug between and hilled up. After they are partly headed, it is the practice of some gardeners to lay them over on one side. Loosening the roots will sometimes retard the bursting of full grown heads.

To preserve cabbages during the winter, pull them on a dry day, and then turn them over on the heads a few hours to drain. Set them out in a cold cellar, or bury them with the head downwards, in long trenches, in a dry situation. In the Middle States, bury the head and part of the stem in the open ground, and place over them a light covering of straw and boards to protect them in severe weather.

Early Jersey Wakefield.—Heads very compact, of medium size, varying from nearly round to conical. An early, sure heading sort, very popular with eastern market gardeners.

Early York.—Heads small, heart-shaped, firm and tender; of very dwarf growth, and may be transplanted fifteen or eighteen inches apart.



Early Large York.



Early Winningstadt.

Early Large York.—Succeeds the Early York, and is equally desirable. It is of large size, about ten days later, more robust, and bears the heat better.

Early Sugar Loaf.—A compact growing variety, and the plants may be set as close as sixteen inches each way, early, but is more affected by the heat than other varieties.

Early Winningstadt.—One of the best for general use, being a sure header, and will grow a hard head under circumstances where most sorts would fail. Heads of regular conical shape, very hard, and keep well winter and summer.

Early Dwarf, Flat Dutch.—Heads of medium size, so'ld, flat, grows low on stump, and is of good flavor.

Fottler's Early Drumhead.—An excellent second early sort, withstands heat, and heads low on stump.



Premium Flat Dutch.



Premium Drumhead.

Premium Large Late Flat Dutch.—Superior to any late cabbage in cultivation. Our stock has been grown for us from carefully selected heads, and is equal to any other strain of this popular variety.

Red Dutch for Pickling.—An esteemed sort for pickling; it forms very hard, oblong heads, round at the top, and when pure, of a dark red or purple color.



Improved American Savoy.

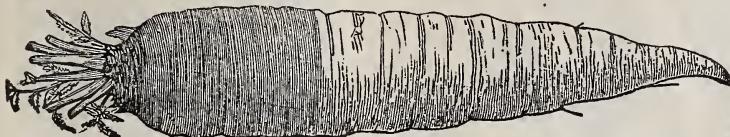
Premium Large Drumhead.—A large fall or winter variety broad, flat or round head short stump, tender and good flavored, and is an excellent keeper.

Improved Drumhead Savoy.—The best of all Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and closely approaches the Cauliflower in delicacy and flavor.

CARROT

The Carrot succeeds best on a light, sandy loam, made rich by manuring the previous year. In freshly manured land, the roots often grow prolonged and ill shaped. It is better to sow as early in the spring as the ground can be made ready, but if planting is necessarily delayed until late in the season, soak the seed twenty-four hours in tepid water, dry by mixing in sifted ashes or plaster, and sow on freshly prepared soil.

Earliest Short Horn (*for forcing*).—The earliest variety in cultivation, used mostly by market gardeners for forcing



Large White Belgian.

Early Scarlet Horn.—The best early variety, flesh deep orange, fine grained, agreeable flavor, and grows well on shallow soil

Danvers.—Medium length, very large and heavy yelder, rich dark orange color, smooth and handsome.

Early Half Long Scarlet (Stump Root).—A popular early variety, medium size; flesh bright scarlet, brittle and of good flavor

Improved Long Orange.—The well known standard; roots long, thickest near the crown, tapering regularly to a point, color deep orange. The best for field crop and table use.

Long Red Altringham.—Similar in form to the Long Orange, but of a bright red color growing with the top an inch or two above the ground.

Large White Belgian.—Grows one-third above the ground; root pure white, green above ground, with small top; raised exclusively for stock



Improved Long Orange

Sow for early about middle September, in a bed of rich clean earth. In about four or five weeks afterwards the plants should be pricked out into another bed, at a distance of four inches from each other every other way; these should be encompassed with garden frames, covered with glazed sashes, and boards or shutters. The beds must be so secured, and the tops of the beds so covered as to keep out all frosts, giving them light and air every mild day throughout the winter; transplant in April into a bed of the richest earth in the garden, at a distance of two feet and a half each way. Keep them well hoed, and bring the earth gradually up to the stems. The late variety matures in the autumn, and is sown and managed similarly to winter cabbage, but is not so certain to succeed in this climate.

Extra Early Paris.—The most popular early variety; white, and almost certain to head.

Lenormand's Short Stem.—The best late variety; large, well formed heads, extra quality, and the best late variety in cultivation.

CELERY

Sow the seed, which is very slow to come up, early in the spring, in rich, mellow ground, in a situation where it can be protected from the parching heat of the summer sun: water freely in dry weather. When the plants are five or six inches high transplant a portion



Lenormand's Short Stem

in trenches well manured; the dwarf varieties three feet and the tall four feet between the rows; plant six inches apart in the rows, pressing the earth to the plants. As they advance in growth blanch by earthing up, which should be performed gradually in fine weather, taking care not to bury the heart of the plants. A light dressing of salt applied when earthing up, is beneficial.

Silver Giant White Solid.—The very best tall growing variety, white, very solid, crisp, tender, and superior in flavor.

Boston Market.—The most popular variety is the Boston Market. It forms a cluster of heads, instead of a single large one, and is remarkably crisp and tender. A good variety for light soils.

Dwarf Golden Heart.—Very fine; when blanched the heart is of a waxy golden yellow, rendering it a most striking and showy variety for either market or private use.

Half Dwarf White Solid.—Is of rather a yellowish white when blanched, and entirely solid, possessing the peculiar nutty flavor of the dwarf kinds, with more vigor of growth.

Dwarf White Solid.—Dwarf, white, or stiff close habit; solid, crisp, and juicy. Keeps in good order later in the season than any other variety.

White Plume.—The stalks and heart are white, of good eating quality, crisp, solid, and of nutty flavor; is ornamental, resembling an ostrich feather.

Matchless Red Solid.—An improvement on the old Red, very compact, solid, and of excellent quality.—The red varieties keep better through the winter, and are yearly becoming more popular.

Celeriac, or Turnip Rooted.—The Root is cooked and sliced, used with vinegar; makes an excellent salad.

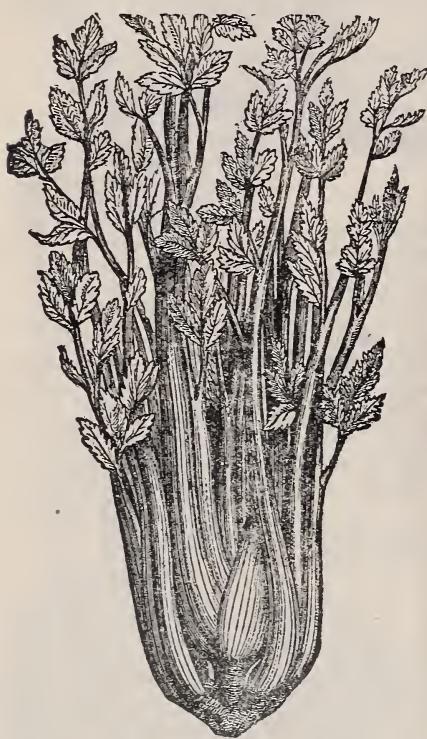
Soup, or Flavoring Celery.—For flavoring soups, stews, etc., not for sowing purposes.

COLLARDS.

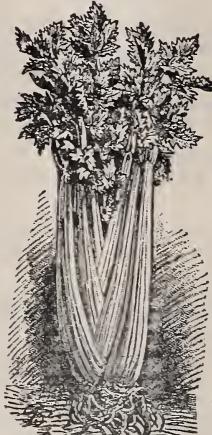
Very popular in the South, where it is principally grown, and used as a substitute for cabbage.

CORN.

Judging from the long and constantly increasing lists of corn which annually appear in the Catalogues issued by the various Seed Houses throughout the country, the reader would be led to believe that they were in innumerable variety, more especially amongst the Early Sweet and other kinds for table use. This, however, is not the case, as upon testing, most of them will be found identical, and the long lists will dwindle down to a few pronounced and distinct varieties; in fact, the difference exists more in name than in anything else. We have, therefore, in the present Catalogue confined ourselves to those distinct and standard varieties, which the practical experience of market and family gardeners has decided to be the best for market and family use. Should other kinds appear which are really valuable they will be placed in stock, and we will gladly procure for our customers any varieties from other Catalogues which they may desire to test.



Boston Market.



Dwarf Golden Heart.

Corn should not be planted until the ground has become sufficiently warm, as cold and wet causes it to rot. Planted every two weeks, until the middle of July, will give a succession throughout the season.

PERKIN'S EARLY EXTRA—The very earliest grown for the Philadelphia market.

F EXTRA EARLY ADAMS.—The old standard, early sort, and its earliness its principal recommendation.

EARLY MARBLEHEAD SUGAR—New, and reported the best Early Sugar Corn.

CORY—An entirely new Extra Early Sugar Corn, ears very large for an early variety, and said to be the earliest sugar corn known.

EARLY SHAKER SUGAR—Introduced by us to the Philadelphia market many years ago; grows fine long ears for an early variety, and is unsurpassed by any of the other early kinds.

EARLY RED NARAGANSETT.—This is the best of the early Red varieties.

DARLING'S EARLY WHITE COB SUGAR.—Early, very tender and first class for main crop.

EARLY LARGE EIGHT-ROWED.—This is the old market standard; a good corn, but not among the earliest.

AMBER CREAM SUGAR.—Medium early, vigorous habit, seven to eight feet high; ears large, twelve to sixteen-rowed, very sweet.

Naragansett. Early Marblehead Sugar. Early Shaker Sugar.

TRIUMPH SWEET—One of the largest of the early varieties; large ears, flavor rich and sweet.

LARGE MAMMOTH SUGAR—The largest of all varieties, productive, fine flavor and sweet. A very desirable variety for the family garden.

IMPROVED STOWELL EVERGREEN—has no superior as a late table variety; ears large, and remains green longer than any other kind.

EGYPTIAN—A new large variety, quite late; quality good, and resembles in some respects, the Evergreen.

EARLY WHITE FLINT—An excellent, productive variety, ears good size, and used for making hominy; a good table variety when cut early.

EIGHT ROWED YELLOW, (*Canada*).—Ears large, and bright yellow color, generally used for re-planting, very early.

MAMMOTH CHESTER COUNTY—One of the very best for field culture; fine large ears, and producing a large quantity of fodder.

MAMMOTH DENT.—A cross between the Mammoth Chester County and the Oregon; we think this the most productive variety grown.

GOLDEN BEAUTY.—Matures as early as the Golden Dent, and surpasses it in size, beauty of grain and productiveness.

LONGFELLOW CORN—Eight-Rowed, Yellowflint, extremely early, and very productive. Ears from ten to fifteen inches long.

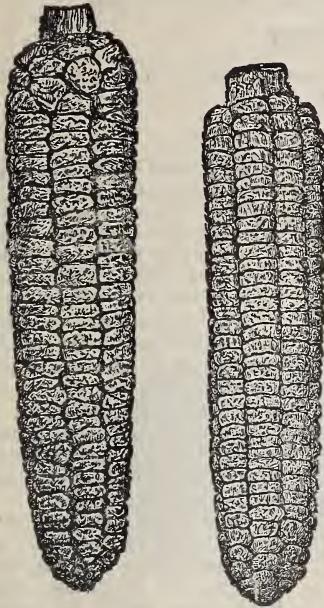
GOLDEN DENT.—This variety is coming to the front again; large beautiful ears, and good cropper.

BLUNT'S PROLIFIC—Probably the most prolific corn grown, and is doubtless the best variety for Ensilage.

LEAMING—One of the recently introduced varieties, medium, well grained ear, good color, and excellent for grinding.

SWEET FODDER CORN—Sown broadcast two bushels, and in drills three feet apart, one bushel per acre, either sweet or field varieties.

Mammoth Sugar Corn



CORN SALAD (Broad Leaved)

Used as a small salad throughout the winter and spring. Sow early in the spring in drills one foot apart, and keep weeds down by frequent hoeing. For winter and early spring use, sow in drills in August and September. Cover with straw on approach of winter.

CRESS—Pepper Grass

CURLED.—WATER. Used as a small salad. Sow very thickly in shallow drills, on a smooth surface, at short intervals throughout the season.

CUCUMBER.

The Cucumber can be grown by any one who has a few square yards of soil with an exposure to the sun. For early use, make rich hills of well rotted manure the latter part of spring planting a dozen or more seeds, covering one-half to an inch deep, pressing the earth firmly over them. When danger from insects is over, pull all but three or four of the strongest plants, make the hills from four to six feet apart. For pickles, plant as late as middle of July.

Early Russian.—Earliest and hardiest productive variety the fruit of small size and produced in pairs.

EARLY FRAME.—Fruit is straight and well formed, flesh tender, though somewhat seedy; when young makes excellent pickles.

IMPROVED EARLY WHITE SPINE.—The very best sort for table use; vines vigorous, fruit straight and handsome, color light green, with few white prickles; tender, and of excellent flavor.



Long Green.



Early Russian.



Early Frame.

LONG GREEN (*Jersey Pickle*).—The best pickling variety, dark green color, tender, crisp, and productive.

SHORT GREEN PICKLE—This is the favorite Western pickling variety, and is growing in favor here every season.

LONG GREEN TURKEY—An excellent pickling variety, color dark green, firm and crisp.

GHERKIN (*Burr Pickle*).—Small, oval shaped, prickly variety, used only for pickling.



Improved Egg-Plant.



Early Egg-Plant.

(See next pag

EGG-PLANT.

Sow in hot-beds early in March; transplant middle of May to first of June, in a rich, warm piece of ground, about thirty inches apart. Draw the earth up to their stems when about a foot high. Egg-plant seed will not vegetate freely without substantial heat, and if the plant gets the least chilled in the earlier stages of growth, they seldom recover. Repeated sowings are sometimes necessary. Care should be taken in cutting the fruit so as not to disturb the roots, which injures the plants.

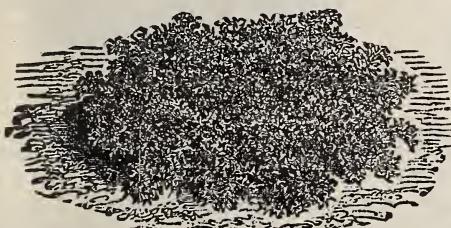
Early Long Purple.—This is one of the earliest varieties, hardy and productive; fruit long and of superior quality.

Improved New York Purple.—The best variety in cultivation; fruit large, deep purple color, occasional stripes of green around the stem; of very superior flavor.

Black Pekin.—Fruit black, large, smooth and glossy. Round to globular.

ENDIVE.

An excellent Fall and Winter Salad, when Lettuce is getting scarce. Sow late in the Spring to middle of Summer in shallow drills, and thin out to a foot apart; blanch by tying the leaves together near the top.



Green Curled.



Broad Leaved Batavian.

Green Curled.—Is the hardiest variety, with beautifully curled, dark green leaves, which blanch white, and are very crisp and tender.

Broad Leaved Batavian.—Has broad, thick, plain or slightly wrinkled leaves. It is principally used for cooking, and making a larger head, is preferred for stews and soups. If the outer leaves are gathered and tied on the top, the whole plant will blanch nicely, and make an excellent salad for the table.

KALE (Borecole.)

Sow from May to June, and set out the plants in July, in good rich soil; cultivate same as cabbage. For Spring use sow in September; protect during Winter with covering of straw.

Green Curled Scotch.—About two feet high, leaves dark green, curled and wrinkled, stands winter without protection.

Dwarf German Greens.—Makes excellent greens for winter use, dwarf and easily protected during the Winter.

LEEK.

The Leek is hardy and of easy culture; sow early in Spring in trenches eight inches deep, and have soil at the bottom fine and rich; thin six to eight inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant.

London Flag.—This is the best variety, and succeeds better in this country than any other.

LETTUCE.

There is no vegetable which is more universally used than this. It is of easy culture, and thrives best in rich, moist soil. Its quality depends largely upon rapid and vigorous growth; to secure this, have the soil rich and mellow, with frequent surface cultivation and an abundant supply of water. For an early crop sow in September in the open ground, transplant when large enough into cold frames; protect during winter in same manner as early cabbage; plant out early in April, or sow in hot-beds in February or March, and afterwards transplant.



Simpson's Early Curled.



Philadelphia White Dutch Butter.



Brown Dutch.

PHILADELPHIA WHITE DUTCH BUTTER.—The best variety for cultivation in the latitude of Philadelphia, fine large heads, and stands the heat of Summer well.

ROYAL CABBAGE—Large, crisp and tender: a good Summer variety.

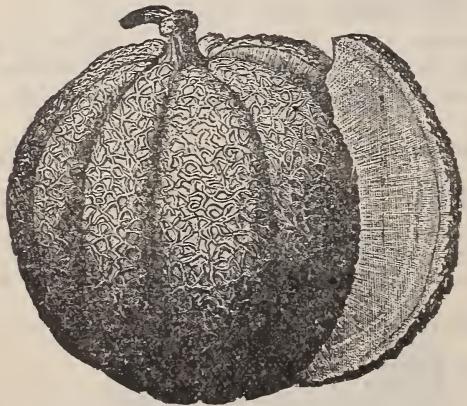
BROWN DUTCH.—Leaves large, green, tinged with brown; very hardy, and of fine quality.

MELON (Canteloupe.)

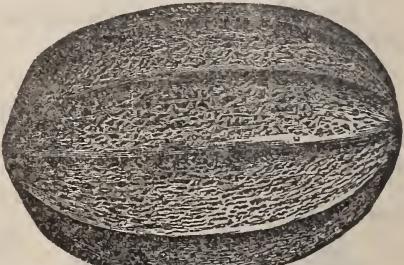
Plant early in May, when the ground has become warm and dry, in hills six feet apart each way; use well rotted manure, and if plants grow very rank, finer fruit will be secured by trimming off the ends of the shoots when about three feet long. Do not plant near pumpkins, squashes or cucumbers, as they will mix with and injure the quality of the melons.

GOLDEN JENNY.—Small, and very early; globe-shaped, skin green, ribbed and netted, flesh light green and of fine flavor.

JENNY LIND.—The earliest green fleshed melon, and the sweetest variety in cultivation; flesh green, quite small, slightly ribbed and well netted.



Luckenbach.



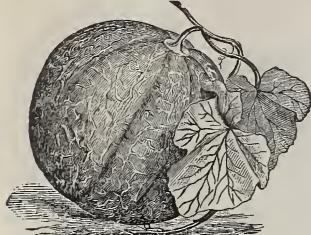
Bay View.

PINE APPLE.—Very fine, nutmeg shape, flesh thick and green, very firm, juicy and sweet.

GREEN NETTED—The old favorite, nearly round, good sized, well netted, flesh thick sweet, and fine flavor.

MONTREAL GREEN NUTMEG.—Large and attractive, nearly round, flattened at ends, deep ribs, thickly netted, flesh thick, sugary, of green color, and excellent flavor.

HACKENSACK.—A popular large size melon, flattened at the poles, deep netted and ribbed, flesh green and well flavored. One of the best for shipping, and is a favorite with market gardeners.



Green Netted Melon.



Montreal Nutmeg.

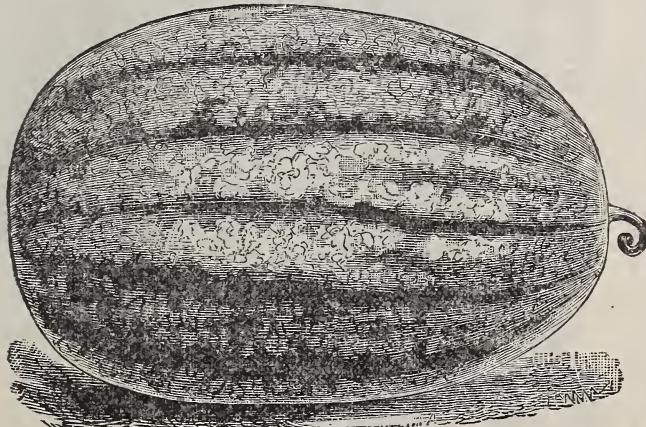
SKILLMAN'S FINE NETTED.—Fruit round, flattened at the ends; flesh green, thick and of delicious flavor.

BAY VIEW.—Fruit large, ten to sixteen inches long, ripens up finely if picked green, making it one of the best for shipping long distances.

CASABA—One of the best in cultivation; flesh green, sweet, melting and delicious.

MELON (Water.)

The Water Melon succeeds best on light, sandy soil, but the young plant requires a good start, and for this should have hills of rich earth, made so with well rotted manure.



Cuban Queen.

MOUNTAIN SWEET.—The old New Jersey variety, equal to the best.

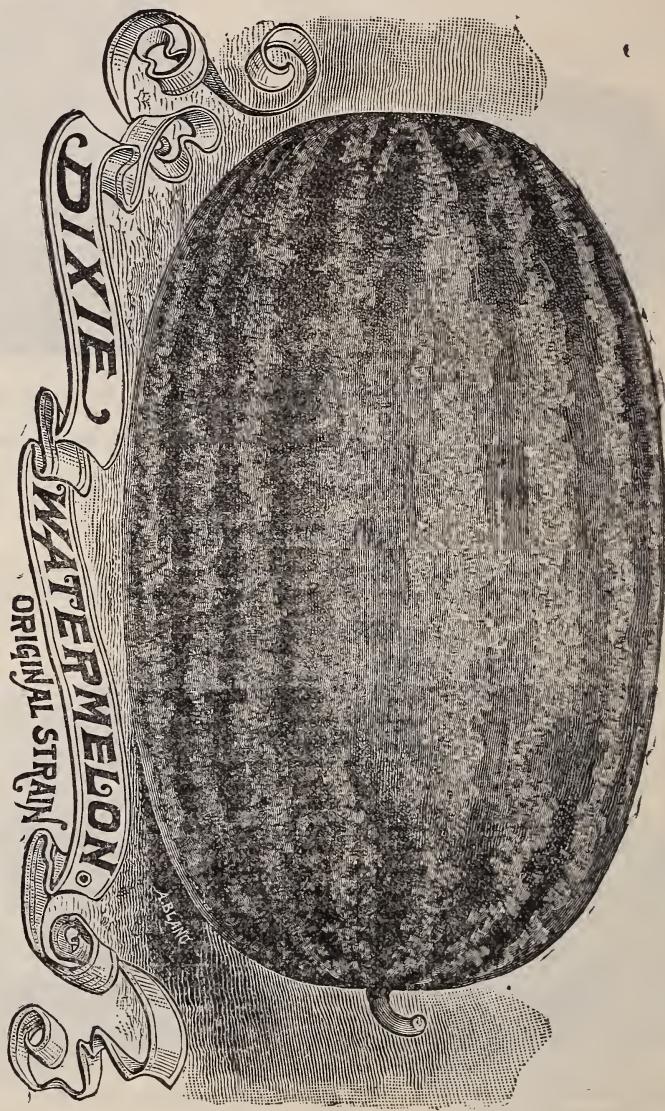


Ice Cream. (See next page.)

Mountain Sprout.—Large oblong variety, gray seed, dark green skin, red flesh and good quality.

Black Spanish.—Large round, dark green skin, flesh red, sweet and delicious, a first class market variety.

CUBAN QUEEN.—One of the largest melons known; vine vigorous, skin striped, light and dark green; rind medium thick, flesh bright red, solid, crisp and sugary,



Dixie Watermelon.—Destined to supersede the Gem. If you want the best melon grown plant the Dixie. It is unsurpassed in fine eating qualities. Form long to half long, diameter large; rind dark with lighter stripes. Early as the Gem, equally productive. Flesh deep red: unequaled as a shipper. We have had seed grown especially for our trade of the best stock. For price see our price list.

Gypsy or Rattlesnake.—One of the large varieties, stands shipments long distances better than any other. Fruit long, smooth, distinctly striped and mottled light and dark green

Ice Cream.—Medium size, scarlet flesh and very sweet; an excellent variety.

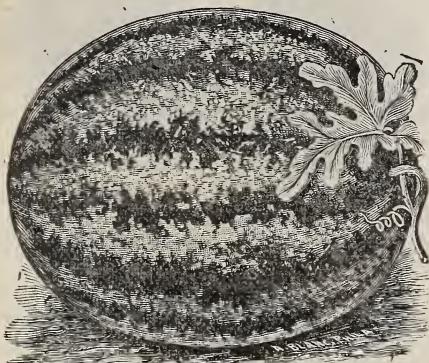
Orange.—Small size, flesh red, tender and sweet, separates from the rind like an orange.

The Boss.—New, handsome oblong variety, skin very dark, deep scarlet flesh, sugary and of excellent flavor.

Light Icing.—Very light green skins flesh bright red, crisp and sugary, excellent quality.

Dark Icing.—Skin dark green; in other respects like the preceding melon.

Kolb's Gem.—A new introduction. Has a hard rind and is a good shipper. Shape nearly round. Flesh red and of good quality.



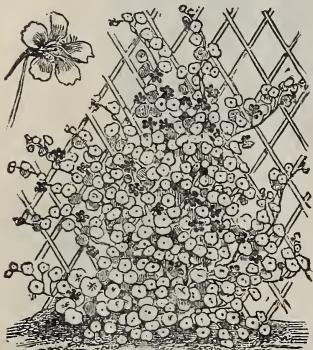
Kolb's Gem.

White English.—This is the kind usually preferred for salad. The leaves are light green, mild and tender when young; seed light yellow.

Brown Italian.—This is a larger plant than the preceding, with much darker leaves; seed brown and more pungent.

MUSTARD

Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinach.



Nasturtium.

NASTURTIUM

Used as a pickle and highly esteemed. Sow in drills two inches deep, in April and May, five or six inches apart, and provide them with rods. It may also be grown to advantage as an ornamental climbing plant.

OKRA, OR COMBO

The green capsules of this plant are used in soups, stews, etc., to which they impart a rich flavor, and are considered nutritious. Plant the seeds about the middle of May, in hills or drills. Plant the seeds thickly, as it is liable to rot in the ground; rich ground is necessary.

Tall White.—About four feet high; pods eight to ten inches long.

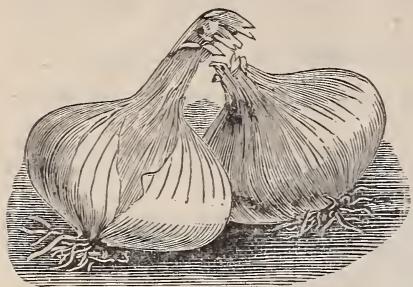
Dwarf White.—Two and a half feet high; pods five inches long; very productive.

ONION

A strong, deep soil is desirable for this crop. The ground should be dressed with well rotted manure.

The Silver skin and Yellow Strasburg are principally grown (for sets) in this vicinity. Sow the seed early in the Spring, very thickly in beds or drills. As soon as the tops die off in the Summer, remove them to a dry, airy place, and early in the following Spring replant in rows about two inches apart, the rows wide enough apart to admit of hoeing. The Onions by this process, are obtained of a large size early in the season.

The Large Red Wethersfield may be reared to full size during the first season, by sowing in drills early in March, in strong land, and thinning them out to stand two or three inches apart, keeping them well hoed.



White Portugal.



Early Red Onion.

Extra Early Red.—A large yielder, of good form and flavor, deep red color, and keeps well. Ten days earlier than the Wethersfield.

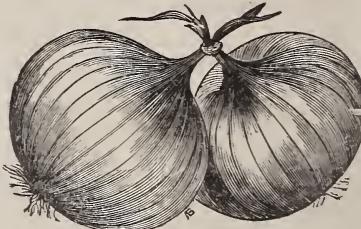
Large Red Wethersfield.—The standard Eastern variety. Grows to large size directly from the seed ; skin deep purplish red ; form round, flat ; flesh purplish white ; and stronger flavored than any of the other kinds.

Yellow Strasburg.—The old popular Philadelphia variety ; not as strong flavored as the Red ; a first rate keeper, and valuable for shipping.

Yellow Danvers.—A fine variety, originating in Danvers, Mass. ; above the medium size, oval shaped ; skin yellowish brown ; flesh white, mild and well flavored, very productive.



Queen



Yellow Danvers.

Silver Skin or White Portugal.—Large flat Onion of mild flavor ; fine for early winter use, and very desirable for pickling. It is the best keeper of the white varieties.

Queen.—A silver skinned variety, of mild flavor, early, a good keeper, and an excellent pickling Onion.

ONION SETS

The Onion sets grown in the vicinity of Philadelphia are recognized everywhere as the best in the country ; they are more solid and brighter, and their keeping qualities much better than those grown elsewhere. The best varieties are the *Early Red*, *Yellow Strasburg*, *Yellow Danvers* and *White Silver Skin*. Onions grown from sets come into market long before those grown directly from the seeds, and in consequence much higher prices are realized from them.

PARSNIPS

This well known culinary vegetable does best on a deep, rich, sandy soil ; fresh manure should not be used, as it is apt to make the roots coarse and ill-shaped. The seed is sometimes slow to germinate : it should be sown early as possible, covering half an inch deep, and the soil pressed firmly over the seed ; thin out so that the plants will stand four inches apart.

Long White Dutch.—Very hardy, and keeps through the Winter without protection,

Sugar or Hollow Crowned.--The very best for table use, very productive.



PARSLEY

Sow early in April in rows. Soak the seed a few hours in warm water before sowing, or it may lay two or three weeks in the ground before vegetating. A few Radish Seed mixed with the seed when sowing will mark the rows and facilitate weeding.

PLAIN OR SINGLE—Dark green color, and very hardy.

DOUBLE CURLED—A dwarf curled variety, which is the best for all purposes.

MOSS CURLED—Leaves bright green, curled and crested like fern or moss, very ornamental for garnishing or garden decoration.



PEAS

The Pea is so generally known that it is needless to give any description of it. There are many new varieties coming out every year, most of which turn out to be no better than the older sorts. We have carefully culled them over, and our list will be found to contain all that are really valuable.

The Pea matures earliest in a light, rich soil; but for general crop, a rich, deep loam will be found best. The Extra Early varieties should be sown as soon as the ground can be worked in the Spring, and continue every two weeks for a succession. The tall varieties require brush stuck in between rows. The wrinkled varieties are superior, more delicate in flavor, and remain longer in season than the smooth sorts, but are not so hardy.

The dwarf varieties suit best for small gardens, and can be planted in rows one foot apart.

IMPROVED PREMIER EXTRA EARLY PEA.—This is undoubtedly the best and earliest Pea grown.

CLEVELAND'S ALASKA, (New)—See cut on page 41.

CLEVELAND'S RURAL NEW YORKER, (New)

MINGLE'S EXTRA EARLY.—For family use this is probably equal to the Improved Premier; it does not ripen so evenly, but keeps in bearing longer.



Improved Premier.

EARLY KENT.—An old early variety, ripening about a week later than the Extra Early; height three feet.

EARLY FRAME,—Also known as Early Washington, Early May, Daniel O'Rourke, etc. This is a standard second early variety, a good bearer, and where earliness is not desired is a first-rate family garden Pea.

TOM THUMB.—Very dwarf, grows only ten inches high, excellent quality and productive.

MCLEAN'S LITTLE GEM.—Highly recommended for garden cultivation; quite dwarf, and among the earliest.

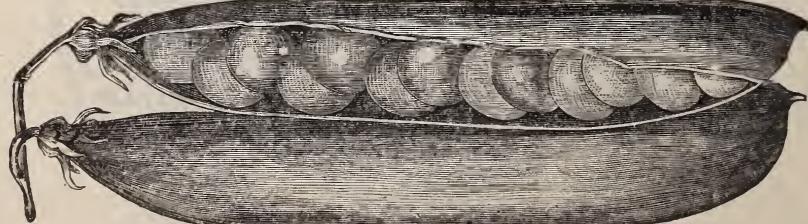
MCLEAN'S PREMIUM GEM.—An improvement on the Little Gem, being larger and more productive. Does not ripen quite so early, is very luscious in flavor, and is general favorite.

AMERICAN WONDER.—A hybrid between Champion of England and Little Gem; grows eight to ten inches high; it is an enormous cropper, and ripens in about fifty days from germination.

KENTISH INVICTA.—A productive variety of excellent flavor; color, yellowish green, height two feet, and one of the best among the lately introduced Peas.

MCLEAN'S BLUE PETER.—Grows about ten inches high, takes its name from the color of the ripened Peas; the pods are large and showy, and the Peas exceedingly sweet.

ADVANCER.—A green wrinkled variety maturing in from fifty to sixty days, producing an abundance of well filled broad, long pods, considered one of the best of its kind.



Telephone.

TELEPHONE.—One of the recent introductions from England, where it is highly prized—grows about three feet high, and is the best tall Pea in existence, an enormous bearer, producing straight, showy pods, containing from nine to ten peas in a pod.



AMERICAN WONDER



Premium Gem.

Lexton's Marvel.—Seeds white, wrinkled, of remarkably showy growth. Pods long and finely shaped, well filled with Peas of desirable quality; a fine cropper, height two feet.



Champion of England Peas.

YORKSHIRE HERO.—Vines stout, about two feet high, pods broad and well filled, large Peas; hardy, productive, and superior flavor, and will be preferred to any other, by those who want a rich marrow-like Pea.

EUGENIE.—An old favorite, of delicious flavor; ripens in sixty to sixty-five days, foliage dark, and continues long in bearing, a universal favorite.

DWARF CHAMPION OF ENGLAND.—Very much liked by those who have tried it. In quality and flavor equal to Champion of England, and the vine much more dwarf. Equal to Little Gem, except that it is ten days later.

CHAMPION OF ENGLAND.—Universally admitted to be one of the richest and best flavored Peas grown; height four to five feet; seed whitish green and shriveled, and a profuse bearer.

FORTY FOLD.—A very fine Pea, grows about the same height as Champion, very superior quality, and very productive.

STRATAGEM.—New late green wrinkled marrow variety, growth one and a half feet high great bearer and of excellent quality. *See Cut next page.*

LARGE BLUE IMPERIAL. About three feet high, pods long, rather flat, containing eight or nine Peas, a good bearer, and one of the best varieties for summer use.

IRISH DWARF WHITE MARROW FAT.—Similar in appearance and general character to the Large White Marrowfat, but of much dwarfer growth, being only about three feet high, it requires no brush, and is much earlier than the Tall Marrowfat; as a late market Pea it has no equal.



Stratagem Peas—See page 43.

Large White Marrowfat.—About five feet high, and of strong growth; pods large, round and well filled; is undoubtedly, one of the greatest bearers in field or garden.

Large Black-Eyed Marrowfat.—A late variety, well known on the Philadelphia market as a prolific bearer, and is recommended as one of the very best Marrowfat varieties.

Field Sorts.—We keep in stock all the varieties used for soiling or ploughing in as green manures; a practice which is becoming quite general in this latitude.



Long Red Cayenne.

PEPPER

Sow in hot beds in March, or in a warm border early in May, transplant and thin out to stand sixteen or eighteen inches apart; hoe frequently, to keep down the weeds.

Large Sweet Bell or Bull-Nose.—A large sort, of square form, mild, thick and hard; suitable for filling with cabbage, and for a mixed pickle. It is notwithstanding its size, one of the earliest varieties.

Tomato or Squash.—Fruit flat, shaped like the Tomato.

Long Red Cayenne.—Pod long, slim and pointed; color bright red and very pungent.

Sweet Mountain.—Nearly identical with the Bull-Nose; perhaps somewhat larger.

Long Red Cayenne.

PUMPKIN

Sow in hills eight or ten feet apart each way, or in fields of corn, about every fourth hill; avoid planting near melon or squash vines, as they will hybridize.

Sweet Potato.—Flesh yellow and dry, the very best for family use.

Cashaw.—Long Yellow Crook Neck, one of the best among Pumpkins; sometimes weigh as much as sixty to eighty pounds.

Cheese.—One of the best for table use; shape flat, like a cheese box; flesh yellow and sweet.

Common Field.—Best for cattle feeding.

POTATO

EARLY VERMONT,
EARLY ROSE,
EARLY SUNRISE,
BURBANK SEEDING,

DAKOTA RED,
WHITE PEACH BLOW,
BEAUTY OF HEBRON,
MAGNUM BONUM,

SNOW FLAKE,
WHITE STAR,
MAMMOTH PEARL,
WHITE ELEPHANT.

The soil best suited to the Potato is a rich sandy loam, but it seems to thrive in almost any soil and climate. The best fertilizers are plaster, super-phosphate of lime and bone-dust. Plant as early in the spring as the ground can be worked thoroughly, covering about four inches in warm soil, and in wet soil three inches deep, cultivate to keep down weeds, and draw earth to the plants as they advance in growth.

There are many so called new varieties offered every season, but they disappear quickly. There is really none to be found better than the Early Rose, Snow Flake, and White Peach Blow.

RADISH

Should be sown in a warm, sandy, loam, enriched by well rotted manure, and a liberal dressing of salt, this will have the effect of making them brittle and free from worms. Sow as early as the ground can be worked, and thin to two inches apart as soon as the rough leaves appear.

Radishes must have plenty of room and be grown quickly, otherwise they will be tough and wormy.

EARLY LONG SCARLET SHORT TOP (improved).—The best standard variety for private gardens or market use, is brittle and crisp, and of quick growth; color bright scarlet, small top, and is uniformly straight and smooth.

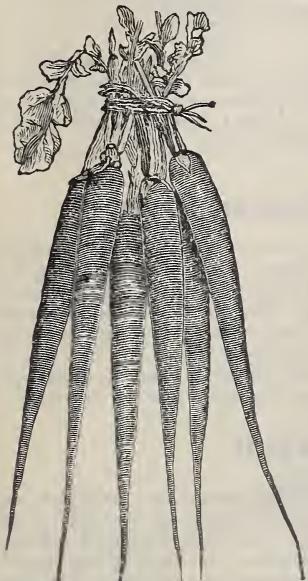
EARLY SCARLET TURNIP—The earliest of the Turnips varieties; small root and small top.

White Tipped Scarlet Turnip.—Fine French variety; scarlet bulb with white tip, very showy and ornamental.

Early Red Turnip Rooted.—This is the old favorite, and there are few that are better. (*See Cut.*)

Early Deep Scarlet Turnip Rooted.—An improvement on the former very smooth and rich dark color.

Early White Turnip Rooted.—Like the preceding in shape, but pure white in color; bears the heat well without becoming spongy, a few days later than the former.



Early Long Scarlet Short Top (improved).



Early Scarlet Turnip.

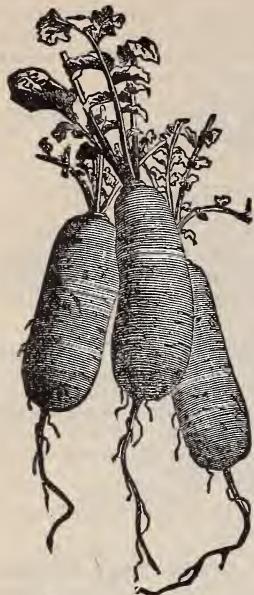
EARLY SCARLET OLIVE-SHAPED—In form of an olive; fresh rose colored, tender and excellent.

EARLY YELLOW SUMMER TURNIP.—Oblong, turnip shaped and russet colored, much larger than the Red and White Turnip varieties; solid and brittle, and stands heat better than any other kind.

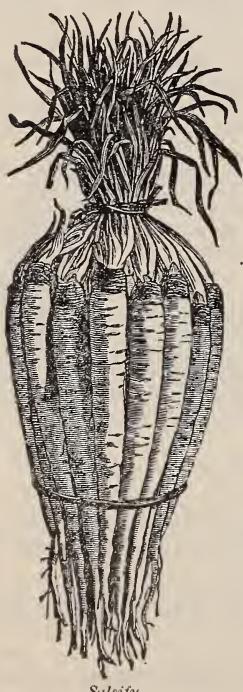
GOLDEN GLOBE.—A fine French variety, amber colored, mild flavor, and keeps long in eating condition.

SCARLET CHINA WINTER—Form conical, of a bright rose color, flesh firm and pungent flavor.

WHITE CHINA WINTER.—Similar in shape to the preceding; flesh piquant, solid and brittle; an excellent sort for late Fall or Winter use.



Winter China (Page 45.)



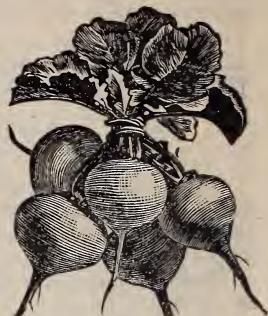
Salsify

Long Black Spanish Winter.—One of the latest as well as one of the hardiest of Radishes, and is one of the best for Winter use; roots oblong, black, of large size and firm texture.

LARGE WHITE SPANISH WINTER Differing from the Black Spanish only in color.

RAPE.

Extensively cultivated in England for the seed, from which is manufactured Rape Seed Oil. As a forage plant it yields abundantly; fed green it is eaten by nearly all animals, and is very nutritious. Sow in May ten pounds broadcast, and in drills four pounds per acre.



Early Red Turnip (Page 45.)

Rhubarb or Pie Plant.

It is cultivated in gardens for its leaf stalks; used for pies and tarts, it is fit for use before green fruit can be had, and is an excellent substitute. Sow seed in the seed bed early in Spring, and transplant in Autumn or ensuing Spring to any desired situation, allowing plants three feet square space.

Salsify or Vegetable Oyster.

Sow early in the Spring, in deeply dug and richly manured soil, in drills eighteen inches apart. Keep clear of weeds, and when up a few inches, thin out, so as to stand four or five inches apart. This is a hardy vegetable and can remain in the ground all Winter for early Spring use, but should be taken out before they start growing. It is excellent for the table, and can be served as Carrots, or, after being parboiled, may be made into cakes and fried like oysters, which they greatly resemble in flavor.

SPINACH.

The Spinach is very hardy, wholesome and palatable, and make a delicious dish of greens. Should be planted in rich ground. Sow in drills one foot apart, and commence thinning out when the leaves are an inch wide. For early spring use, the seed should be sown middle of Autumn, and will require through the Winter a slight protection of leaves or straw. For Spring and early Summer use, sow as early as the ground can be tilled, and at short intervals, if a succession is desired.

ROUND LEAVED SUMMER.—(*Extra Curled.*)—This variety is the best and most popular with our market gardeners; leaves large, thick and fleshy, and stands the Winter well.

LARGE LEAVED FLANDERS—Has a very erect habit of growth, and preferred by many on that account.

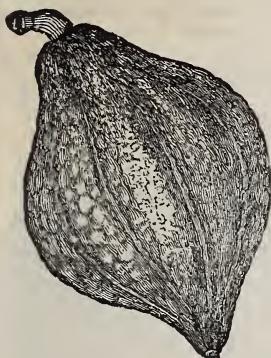
PRICKLY SEEDED—The hardiest variety, and will withstand the severest weather, with only a slight protection of leaves or straw; seed is prickly, leaves oblong and triangular. It is the best for Fall sowing.

LONG STANDING—New large crimped fleshy leaved variety; stands two weeks longer than any other variety before running to seed. Best kind for seed sowing.

MONSTROUS VIROFLAY—A mammoth variety of good quality, much used in Europe.

SQUASH

Cultivate same as Cucumbers or Melons. The summer varieties should be planted four or six feet apart each way, and the Winter sorts eight feet. Three plants are sufficient for a hill.



Hubbard.

EARLY WHITE BUSH, OR PATTY PAN—The earliest in maturing, and very productive.

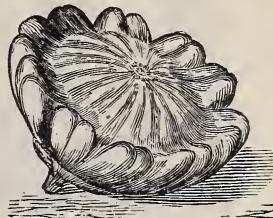
EARLY GOLDEN SCOLLOP Bush.—Like the preceding, except being of a golden color.

GOLDEN SUMMER CROOK-NECK.—The best of the Summer squashes, gold color, profusely covered with warty excressences; very superior flavor.

WINTER CROOK NECK,—Shape like a Cashaw pumpkin, grown for Winter use; is a good keeper.

BOSTON MARROW.—A Fall and Winter variety, very popular, oval form, thin skin; when ripe, bright orange color, fine grained, and for sweetness unsurpassed.

HUBBARD.—A very superior variety, flesh bright orange yellow; dry, sweet and rich flavored, good keeper, boils or bakes exceedingly dry.



Early White Bush, or Patty Pan.



Golden Summer Crook-Neck Squash.

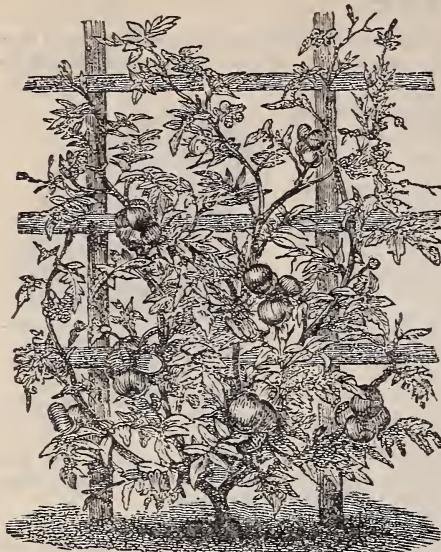
WHITE PINAPPLE SQUASH.—A superb variety for pies; it cannot be excelled.

AMERICAN TURBAN.—Flesh orange yellow, good flavor and excellent for Fall and Winter use.

TOMATO

Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous, unchecked growth during the early part of the season. To have them very early the plants should be started in a hot-bed; transplant carefully, and cultivate well as long as the vines will permit. Tying to a trellis or stakes, improves the quality.

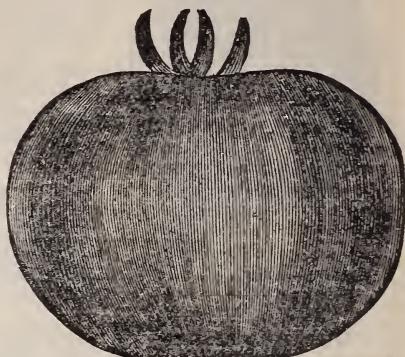
EXTRA EARLY. (or Cluster).—The earliest variety, and desirable only on that account.



Early Tomato.

Extra Early Richmond.—Almost as early as the Early Cluster, larger and smoother, it is a favorite among truckers, and is a good shipper.

Hathaways' Excelsior.—Quite early, vigorous growth, vines large, and productive throughout the season. Fruit dark rich color, slightly below medium size, but always round and smooth.



Paragon.

ACME.—One of the most popular varieties; vines large, and produce abundantly until frost. Fruit in clusters, color maroon or reddish, with slight tinge of purple, invariably smooth and round, of good size and unusually solid, is a good shipper.

PARAGON.—Vines large, liberal and productive; fruit large, round, of a dark crimson color, occasionally tinged with purple. The flesh is thick and fine flavored, and taken altogether, it is the best variety yet produced.

LIVINGSTON'S PERFECTION—A handsome new Tomato, so nearly identical with the preceding as to be interchangeable with it.

TILDEN.—A well known and favorite variety, rich color, solid flesh, and desirable in every way.

LIVINGSTON'S FAVORITE—This is the most perfect shaped Tomato in cultivation, is smoother than the Paragon, and does not crack or rot like the Acme. It ripens evenly, and as early as any good variety; very prolific, good flavor, few seeds, solid, and a good shipper.

TROPHY.—Well known as one of the best; vines of medium size, but producing large quantities of fruit, which is large, smooth, and bright red in color.

LARGE RED.—An old, reliable variety, resembling the Tilden.

LIVINGSTON'S BEAUTY.—The very latest production of Mr. Livingston, and claimed to be the best; color a bright glossy crimson, slightly tinged with purple, grows in clusters of four or five large fruits, and retains its size until late in the season, and will average more pounds of fruit to the acre than any other variety.

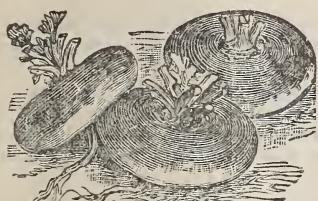
COOK'S FAVORITE—A solid, nearly round Tomato, very desirable, and almost identical with the "Canada Victor."

FEJEE IMPROVED—One of the best; color maroon, solid flesh, very productive, and known as the Beefsteak Tomato.

PEAR SHAPED—*Yellow and Red.* Used for preserves and pickles; is extraordinarily productive.

TURNIP.

Early Purple Top Munich.—A handsome early Turnip, decidedly earlier than any other sort; color white with bright purplish red top; of fine quality when young and recommended as the very best for a first crop.



Early Purple Top Munich.

Early Flat Dutch (Strap Leaved).—This is the most popular early Turnip for table use; very early, sweet and tender, and sure to bulb.

Early Purple Top (Strap Leaved).—Very similar to the preceding except in color, being purple or dark red on top; form round, flat, with but few leaves, which are of upright growth. This is the standard variety, and there is none better for general purposes.

Large Early Red Top Globe.—Only recently introduced; very attractive, of large size and rapid growth. It is a very heavy producer, and quite as early as the Flat Red Top.

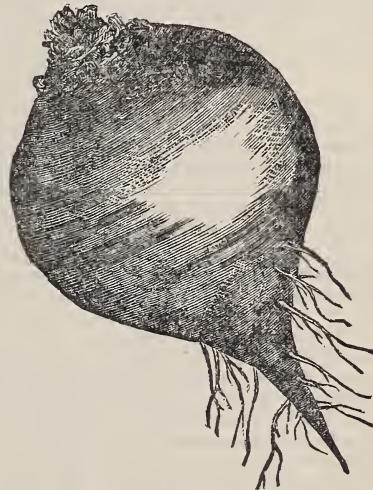
Early White Egg.—A recently introduced variety; color pure white, egg-shaped, of very rapid growth, and of good quality.

Pomeranian White Globe (Strap Leaved).—A free-growing, rough-leaved variety, and very productive; will, frequently, in good rich soil grow to ten or twelve pounds in weight; it is a perfect globe in shape, skin white and smooth. A first rate kind for either table use or stock.

White Norfolk.—One of the standard field sorts; and is extensively grown everywhere for stock feeding. In shape, round, color white, and often grows to large size. It is an admirable keeper.



Early Purple Top—Strap Leaved.



Improved American Ruta Baga.

Cow Horn.—This variety is carrot-shape, and grows nearly half out of the ground; is pure white, except slight shade of green at top. It is well flavored, of rapid growth, and seems to be increasing in favor every year.

Amber Globe (Strap-Leaved).—This is one of the best of the rough leaved sorts, for either table use or for stock; flesh yellow, fine grained and sweet; hardy, keeps well, is a good cropper, and grows to a very large size.

Yellow Aberdeen.—This is a very nutritious cattle turnip; flesh pale yellow, tender and sugary; is a good keeper, hardy and productive. It is an old favorite, and for stock purposes hard to beat.

Robertson's Golden Ball (Orange Jelly).—One of the most delicate and sweetest yellow flesh Turnips yet introduced; does not attain a very large size, but is firm and of excellent flavor. Has no superior as a table variety.

Improved Purple Top Yellow Swede (Ruta Baga).—This is the standard and most important now cultivated for stock purposes; noted for rapid growth, large size and nutritious quality, and cannot be too highly recommended.

White Fleshed Purple Top Ruta Baga.—This differs mainly from the preceding in color; possesses most of the good qualities of the yellow, but is of slightly milder flavor. is not as valuable for stock as the yellow.

The above comprise about all the desirable varieties for either table or stock use. There are several others which differ from each other more in name than in anything else, being in most instances identical in their characteristics. We have not noted them here, but any varieties not named, which our customers may desire, we will cheerfully procure, and at such prices as will compare with any other Catalogue.

CLOVER AND GRASS SEEDS.

There are no plants so valuable for fertilizers as the clovers, and as a class they include some of the best forage plants. The common clover is the natural manure of the Northern farmer, and it is the cheapest and best renovator of worn soils. Its full value on poor land is best obtained by securing the first crop for hay, and ploughing under the second crop when in seed in September. The cutting of the growing plants causes the development of a large amount of roots, which extract from the soil large amounts of mineral constituents, which, by the decay of the roots, greatly increase the fertility of the soil; the long roots extend far into the earth, and when they decay leave channels through it for the admission of air and distribution of water. Soils best adapted to clovers are clays and heavy loams, and on such soils lime is the best clover manure. They also do well on soils of lighter character, and when ploughed under as a green manure, add greatly to their fertility. The seed may be sown in Fall or Spring; but in the Eastern and Middle States the best results are usually had from Spring sowing; it should be sown early on a mellow, well prepared soil; plaster will increase the growth remarkably, and should be sown broadcast the season following the seeding.

CRIMSON CLOVER.

Crimson Clover.—Or more commonly called Scarlet, Italian or German Clover, is an annual of French origin, makes a growth from 20 to 30 inches high, has a bright crimson blossom from $1\frac{1}{2}$ to 3 inches long, and when in full bloom with its luxuriant growth of green foliage and its crimson bloom, is a thing of beauty. It is a winter crop, must be sown in July, August and September of each year from which the spring following can be cut for soiling, by the 20th, of April; for ensilage and hay by the 8th of May, and for seed crop by the 25th of May. It will produce on ordinary soil 12 to 15 tons of green food per acre, $1\frac{1}{2}$ to $2\frac{1}{2}$ tons hay per acre, and 2 to 12 bushels seed per acre. Ploughed under as a manurial crop it is worth as a fertilizer \$30. per acre. Experiments at the Delaware Experiment Station, have shown that \$1 invested in seed per acre added 24 bushels corn. While \$1 worth of nitride soda per acre increased the yield of corn only 6 bushels.

Professor Voorhees, Director of the New Jersey Experimental Station, says, on page 21 of station bulletin no. 100: The average of the matured crops on May 24th and 31st contained per acre 200 lbs. nitrogen and 6,500 pounds of organic matter, or equivalent to that contained in 20 tons of city manure, which would cost in that form \$30. On page 29 of the same bulletin Professor Voorhees says; Used as a manure only the average crop per acre is worth \$25, when used as a feed the value is increased to \$40. This plant provides a good pasture before other crops are available. An early pasture is not only valuable for food contained in it, but also because it helps to insure proper feeding and to prevent too early use of other and later pasture. The crop when 6 inches high contained over 1,300 pounds of digestible food per acre, sufficient to properly nourish 12 cows for one week. When sown in July and August it furnishes excellent pasture in December, can also be pastured some in early spring without injury to either hay or seed crop. When Red Clover failed to give a good stand or blighted on wheat stubble, the stubble can be harrowed over and Crimson Clover sown, which will more than make up the loss of the Red Clover. Crimson Clover weighs sixty pounds to the bushel. Ten to fifteen pounds are necessary to seed an acre properly, and after sowing the seed it should be covered by harrowing with a light harrow. Professor Voorhees and other experimentors of high authority regard it as hardy as red clover. It withstood the winter at the Maine experimental station and attained a growth of 26 inches. Good results have been obtained in Northern New York. Crimson Clover will grow on poor light soils when other grasses fail. By its use poor soils can be improved more rapidly than by any other method. Therefore, it is the cheapest and best fertilizer.

It makes an abundant food of highest quality. As pasture, stock prefer it to other grass. As a soiling crop or for Ensilage it cannot be excelled, and for hay stock not only have a decided preference for it, but they thrive remarkably upon it.

The Delaware Experimental Station sums up its uses as follows:—

1. To Plow down for Green Manure.
2. For Silage.
3. For Soiling.
4. For Haymaking.
5. For Seed Production.
6. For Eradication of Weed.
7. For Reduction of Expenses in Cultivating Orchards.
8. For Winter and Spring Pasture.
9. As a Protection for Falling Fruit in Orchards.
10. For Binding drift Soils and for preventing Washing on Hill Sides.

We make Crimson Clover a specialty and we are prepared to furnish it in large or small quantities. We have in stock choice recleaned seed. Prime seed and No. 2 seed which we and furnish at market prices.

MAMMOTH OR LARGE RED.—This variety is best adapted for ploughing under as a green manure; it grows five to six feet high, has large, coarse stalks, which are not liked by cattle. It is not ready to cut for hay until long after the common variety, and when cut leaves the ground bare, making no second growth. Sow at the rate of about ten pounds per acre.

MEDIUM OR COMMON RED—This is the most important of all the varieties of Clover for practical farm purposes; it makes excellent pasture when sown with Timothy and other grasses, and is one of the best fodders for milch cows or sheep; sow at the rate of ten to fifteen pounds per acre, according to nature of the soil.

ALSIKE OR SWEDISH—This is the most hardy of all the Clovers, it resists the severest cold, and extremes of drought and wet, yields large crops of superior hay, and on rich soils may be cut several times in a season; it is perennial, and its long, strong fibrous roots take a firm, deep hold on the soil, preventing washing away of the extra earth from hillsides. It produces superior pasture, and is much liked by cattle; grows well on any soil; stalks are fine and palatable, blossoms globular, sweet and fragrant, and much liked by bees. Sow in Spring or Fall, at rate of about six pounds per acre.

CRIMSON TREFOIL (*Scarlet Italian.*)—Grows about one foot high, with fine stems and long leaves. Blossoms are long, cone shaped, of a dark red or carmine color, grows rapidly, but being an annual, must be re-sown each season; it yields several crops per year, and makes excellent hay. Sow about ten pounds per acre in Spring.

WHITE DUTCH—A small, low growing variety, with creeping stems; mixed with Blue grass or Perennial Rye Grass, or Timothy, it makes a permanent pasture of great value. Its blossoms are round, white, tinged with red, and sweet scented; stems fine and palatable, with numerous leaves of bright green color, blotched with white. Sow about six pounds per acre.

LUCERNE, OR ALFALFA—This is undoubtedly the most valuable variety for permeable sub soils, as it sends down its tap roots in mellow soils to great depths, having been found in sandy soils thirty feet below the surface, far below the reach of drought. The flowers are a pale blue, somewhat difficult to establish the first year, requiring a fine mellow soil, but will then produce a profitable crop for ten or twelve years. The Fall is the best time for sowing in this latitude, though it has done well when sown in the Spring; the ground should be thoroughly prepared, and made smooth and fine. Sow twenty-five pounds per acre, harrow in lightly, and follow with a light roller to properly imbed the seed. It should be cut as soon as it begins to blossom, or even a little earlier; if left too late is apt to become coarse and hard, and is less relished by cattle. In no event should it be allowed to go to seed the first season, as it tends to weaken the plant; it improves rather than exhausts the soil, and as a fertilizer it stands at the head of the list. It may be exterminated at any time by simple ploughing thoroughly, and removing the crowns to where they may be burned or rotted, it yields an enormous amount of green fodder, and can be cut four or five times during the season.

TIMOTHY—This crop to cut for hay, probably surpasses any other grass in cultivation it thrives best on moist, loamy soils, and is not well suited to light, sandy or gravelly soils it should be cut just when the blossom falls. Sow either in Spring or Fall, at the rate of twelve pounds per acre, if alone, but less if mixed with other grasses.

Orchard Grass.—This is one of the most valuable grasses, on account of its quick growth and valuable aftermath. It is ready for pasture in Spring two weeks earlier than most grasses, and when fed off, is again ready for grazing in a week. It is palatable and nutritious, and stock eat it readily when green; it will also withstand severe drought keeping green where many grasses wither, and will endure considerable shade. When sown with Clover it makes excellent hay, as it blossoms at the same time, and they should be cut together; for grazing it has no equal, and should be used more than it is; it has a tendency to grow in tufts, which can be prevented by close cropping and heavy seeding. When sown alone, one and a half to two bushels per acre are required; if sown with clover, half that quantity. It is a perennial, and will last for years, but its habit of growth unfit it for lawns.

Red Top or Herds Grass.—Is a good permanent grass, and makes a good pasture, when fed close; is valuable for low, wet meadows, producing large crops of good hay. It is often sown with Timothy and Red Clover, in which case it makes a close sward.

Kentucky Blue Grass.—This makes an excellent pasture grass, producing a most nourishing food for cattle, retaining its qualities till a late period in Winter, and further South affording abundant food during the Winter. In connection with White Clover it affords a fine and close lawn: for this purpose an extra quantity of seed must be used, say, two bushels Blue Grass and six pounds of White Clover per acre. If sown by itself, either in Spring or Fall, two bushels per acre are required.

Natural Green Grass.—This is the grass par excellence for lawns, making a fine close surface of dark green velvety color. It is very sensitive to good treatment, and will in most cases drive out the other grasses and take possession of the soil. Should be sown not less than two bushels per acre.

Perennial Rye Grass.—A very valuable variety for permanent pasture, and makes a large return of hay; it is very nutritious, and stock are very fond of it; succeeds best on moderately moist land, for which it is peculiarly adapted. It is also largely used for lawns, in conjunction with other grasses. Should be sown in the Spring in quantities of one and a half to two bushels per acre.

Sweet Vernal Grass.—An early and exceedingly fragrant variety, and on that account invaluable for Lawn Grass mixtures, presenting a beautiful appearance, and exhaling a delightful odor when in blossom.

Fine Mixed Lawn Grass.—For fine lawns, careful preparation of the ground, with thorough rolling, are absolutely necessary, following which a selection of the seeds of such grasses as will present a luxuriant verdure from early spring till late in Autumn. There should also be frequent mowings with a lawn mower; no matter how much care has been taken with soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed on the selection of grasses, these we can supply ready mixed, in proper portions of each kind required. We have been exceedingly successful with our mixture, and refer to the many fine lawns around Philadelphia, which have been put down with our mixture. Should be sown two to three bushels per acre.

Common Millet.—Requires a dry, light, rich soil, and grows two and a half to four feet high, with a fine bulk of stalks and leaves, and is excellent for forage. Can be sown in drills or broadcast, from May 1st until last of July. For hay sow one bushel; if for seed one-half bushel per acre.

German, or Golden Millet.—A much improved variety, medium early, growing three to five feet high; the heads are closely condensed, though the spikes are very numerous. It is an enormous cropper; should be sown not less than one bushel per acre, if less will grow coarse and woody, in which state it is not relished by cattle.

Hungarian Grass.—This belongs to the millet family, growing less rank, with small stalks often yielding two to three tons of hay per acre; like millet it is an annual, and requires, to be sown every season, but will produce a larger return than almost any other crop. Sow and cultivate like millet; all kinds of stock eat it with avidity.

AROMATIC AND SWEET HERBS.

ANISE,
BASIL, SWEET,
CARAWAY,
CORIANDER,

*FENNEL,
*LAVENDER,
MARIGOLD, POT,
MARJORUM, SWEET,

*ROSEMARY,
*SAGE,
*SAVORY, SUMMER,
*SAVORY, WINTER,
*THYME.

Those marked with * are perennial, and when once obtained in the garden, may be preserved for years with a little attention. Most of the varieties thrive best on rich, sandy soil, which should be carefully prepared and cultivated, as the young plants are for the most part delicate and easily choked out by weeds. Sow as early as the ground can be made ready, in drills sixteen to eighteen inches apart, or sow in beds in April, and set plants out in June, they should be cut when in bloom, wilted in the sun, and then thoroughly dried in the shade.

PERMANENT GRASSES.

We also furnish single grasses, or several kinds in a mixture, for the production of hay or permanent pasture, to suit either heavy or light land.

MISCELLANEOUS FARM SEEDS.

Under this head we keep in stock all kinds of Spring and Winter Wheats, Rye, Common and Silver Hull Buckwheat, Oats, Field Peas, Spring Vetches and Tares, and all other seeds required for the farm.

BIRD SEEDS.

CANARY,
HEMP,

MILLET,
RAPE,

MAW,
LETTUCE.

And other articles required by the Bird Fancier.



PRICE LIST.

LESS QUANTITIES THAN 1-4 lbs. and 1-4 BUSH. ARE CHARGED AT THE PRICES PER OZ. AND QUART.

While we exercise the greatest care to have all Seed pure and reliable, it is hereby mutually agreed that we are not in any respect liable or responsible for the seeds sold by us, either as to quality or kind, nor any loss or damage arising from any failure thereof in any respect.

SPECIAL PRICES TO MARKET GARDENERS.

	OZ.	LB.
ASPARAGUS.		
Conover's Colossal.....	\$ 10	50
Barr's Mammoth	10	50
Palmetto, (new).....	10	50
BEANS, (<i>Bush, or Snap Shorts.</i>)	QT. BUS.	
Early Mohawk	25	
Early Red Valentine.....	25	
Cleveland's Improved Round		
Pod Valentine	25	
Early Long Yellow Six Weeks...	25	
Early China Red Eye.....	25	
Refugee or Thousand to One.....	25	
Currie's Rust Proof Wax.....	25	5 00
Dwarf German Wax.....	25	5 00
Golden Wax.....	25	5 00
Wardwell's Kidney Wax.....	25	4 50
German Wax, (white seeded)....	25	
Crystal White Wax.....	25	
Ivory Pod Wax.....	25	
White Seeded Valentine.....	25	
White Cranberry.....	15	2 50
Royal Dwarf, White Kidney....	15	2 50
Large White Marrow.....	15	2 50
Dwarf White Navy	15	1 75
Henderson Bush Lima	25	6 00
Burpee Bush Lima.....	30	7 00
Dreers Bush Lima.....	30	7 00
BEANS, (<i>Runners.</i>)		
Extra Early Jersey Lima..	30	7 00
Improved Extra Large Lima,		
(Salem Mammoth).....	30	7 00
Dreer's improved Lima.....	30	8 00
Small White Lima or Carolina....	30	6 00
Horticultural.....	20	5 00
Giant Wax, (<i>Red Seed</i>)	20	6 00
Tall German Wax,.....	20	6 00
BEET.	OZ.	LB.
Extra Early Bassano.....	10	40
Early Egyptian Turnip.....	10	40
Eclipse.....	10	50
Early Blood Turnip	10	40
Bastian's Early Turnip	10	40
Half Long Blood	10	40
Improved Long Dark Blood.....	10	40
Swiss Chard.....	10	40
White Silesian Sugar.....	10	35
Imperial White Sugar	10	35
Giant Long Red Mangel Wurzel	10	35
Long Red Mangel Wurzel	10	35
Yellow Globe Mangel Wurzel...	10	35
Yellow Ovoid Mangel Wurzel	10	35
Red Globe Mangel Wurzel	10	35
Golden Tankard Mangel Wurzel	10	35
BROCCOLI.		
Purple Cape	20	2 50
Early Large White...	20	2 50

	OZ.	LB.
BRUSSELS SPROUTS.		
Dwarf Improved.....	\$ 15	1 25
CABBAGE.		
Large Early York	\$ 15	1 25
Early Jersey Wakefield	15	1 50
Early Winningstadt.....	15	1 50
Early Come.....	15	2 00
Early Sugar Loaf.....	15	2 00
Early Dwarf Flat Dutch	15	1 50
Fottler's Early Drumhead	15	1 50
Premium Large Late Flat Dutch.	15	1 50
Premium Large Drumhead.....	15	1 50
Improved Drumhead Savoy	15	2 00
Red Dutch (<i>for Pickling</i>)	15	2 00
CARROT.		
Earliest Short Horn.....	10	60
Early Scarlet Horn	10	60
Danvers.....	10	60
Early Half Long Scarlet, (<i>Stump Root</i>).....	10	60
Improved Long Orange	10	60
Long Red Altringham	10	60
Large White Belgian	10	50
CAULIFLOWER.		
Extra Early Paris.....	35	5 00
Lenormand's Short Stem.....	50	7 00
CELERY.		
Giant White Solid	15	1 50
Boston Market.....	15	1 50
Dwarf Golden Heart	15	1 50
Half Dwarf Solid	15	1 50
Dwarf White Solid	15	1 50
Flavoring Celery	10	40
Matchless Red Solid	15	1 50
Celeriac, Turnip Rooted	15	1 50
Self Blanching	20	2 50
White Plume	20	2 50
COLLARDS.		
CORN SALAD.....	10	75
CORN.	QT. BUS.	
Cory	15	1 50
Perkins' Extra Early.....	15	1 50
Extra Early Adams	15	2 00
Early Marblehead Sugar	15	2 00
Early Shaker Sugar	15	2 00
Early Red Naragansett	15	2 00
Early Large Eight Rowed	15	2 00
Triumph	15	2 00
Amber Cream Sugar	15	2 00
Crosby's Early	15	2 00
La. ga Mammoth Sugar	15	2 00
Improved Stowell Evergreen	15	2 00
Longfellow	15	2 00

CORN.	QT. BUS.	MELON.	oz. LB.
Egyptian.....	\$ 15 2 00	Mountain Sweet.....	10 50
Early White Flint.....	15 1 25	Black Spanish.....	10 50
Eight Rowed Yellow, (<i>Canada</i>)..	10 1 25	Cuban Queen.....	10 75
Mammoth Chester Co.....	10 1 25	Gipsy, or Rattlesnake.....	10 50
Mammoth Dent.....	10 1 25	Dixie.....	10 50
Golden Beauty.....	10 1 25	The Boss.....	10 50
Golden Dent.....	10 1 25	Ice Cream.....	10 50
Blunt's Prolific.....	10 1 25	Mountain Sprout.....	10 50
Leaming.....	10 1 25	Light Icing.....	10 50
Hickory King.....	10 1 25	Dark Icing.....	10 50
Sweet Fodder Corn.....	10 1 25	Kolb's Gem.....	10 50
CRESS.	oz. LB.	Black Italian.....	10 50
Curled.....	10 50	Iron Clad.....	10 50
Broad Leaved.....	10 60	Citron, for preserving.....	10 50
CUCUMBER.		Large Netted Nutmeg.....	10 50
Early Cluster.....	10 50	Netted Green.....	10 50
Early Frame.....	10 50	Montreal Green Nutmeg.....	10 50
Improved White Spined.....	10 50	Pine Apple Citron.....	10 50
Long Green Turkey.....	10 50	Jenny Lind Citron.....	10 50
Jersey Pickle.....	10 50	Little Gem Citron.....	10 50
Short Green Prolific.....	10 50	Hackensack.....	10 50
Boston Market.....	10 50	Golden Jenny.....	10 50
Gherkin.....	20 80	Early Rough.....	10 50
EGG PLANT.		Bay View.....	10 50
Early Long Purple.....	20 2 00	Surprise.....	10 50
Improved New York Purple.....	20 2 00	MUSTARD. White English.....	5 20
Black Pekin.....	20 2 00	Black Italian.....	5 20
ENDIVE.		NASTURTIUM.....	15 1 00
Green Curled.....	15 1 25	OKRA, or GOMBO, Dwarf and Tall	10 40
Broad Leaved Batavian.....	15 1 25	ONION, Extra Early Pearl.....	20 1 25
GRASS SEED.		Extra Early Red.....	20 1 25
Red Clover Seed.....		Large Red Wethersfield.....	20 1 25
Mammoth Red Clover Seed.....		Large Yellow Strasburg.....	20 1 25
White Clover Seed.....		Yellow Danvers.....	20 1 25
Alsike Clover Seed.....		Silver Skin.....	20 1 50
Crimson Clover Seed.....		Italian Queen.....	20 1 50
Orchard Grass.....		ONION SETS.	
Herds Grass.....		Yellow Strasburg.....	
Red Top.....		Yellow Danvers.....	
Green Grass.....		Silver Skin.....	
Kentucky Blue Grass.....		Early Red.....	
Perennial Rye Grass.....		OATS, &c.	
Lucerne.....		Surprise.....	
Alfalfa.....		White and Black Norway.....	
Mixed Lawn Grass, &c., No. 1....	15 2 50	Welcome.....	
KALE.	oz. LB.	White Belgian.....	
Green Curled.....	10 40	Imported Scotch.....	
Tall Curled Scotch.....	10 40	Excelsior.....	
Dwarf German Greens.....	10 40	White Probsteir.....	
Siberian.....	10 40	Barley.....	
LEEK.		Seed Wheats, &c., &c.....	
Large London Flag.....	15 1 00	PARSLEY.	oz. LB.
Musselburgh.....	15 1 25	Plain.....	10 75
LETTUCE.		Double Curled.....	10 75
Early Curled Silesian.....	15 1 00	Moss Curled.....	10 90
Simpson's Early Curled.....	15 1 00	PARSNIP.	QT. BUS.
Large Curled India.....	15 1 00	Sugar, or Hollow Crowned.....	10 50
Large Drumhead.....	15 1 00	Long White Dutch.....	10 50
White Dutch Butterhead.....	15 1 00	PEAS.	QT. BUS.
Royal Cabbage.....	15 1 00	Mingle's Extra Early.....	15 3 00
Brown Dutch Butterhead.....	15 1 00	Improved Premier, Extra Early..	15 3 00

PEAS.

	QT.	BUS.
Tom Thumb.....	\$ 20	4 00
Improved Little Gem.....	20	3 50
McLean's Premium Gem.....	20	3 50
American Wonder.....	25	4 00
Kentish Invicta.....	25	4 00
McLean's Blue Peter.....	20	3 50
Advancer.....	20	3 50
Early Kent.....	20	3 50
Early Frame.....	15	3 00
Stratagem.....	20	3 50
Telephone (new).....	20	4 00
Laxton's Marvel.....	20	4 50
Yorkshire Hero.....	15	3 00
Eugenie.....	20	3 50
Dwarf Champion of England.....	15	3 00
Tall Champion of England.....	15	3 00
First and Best.....	15	3 00
Large Blue Imperial.....	15	3 00
Large White Marrowfat (dwarf).....	15	1 40
Large Black Eyed Marrowfat.....	15	1 50
Canada Field.....	10	1 00

PEPPER.

	oz.	LB.
Large Sweet Bell.....	15	1 50
Tomato or Cheese.....	15	1 50
Long Red Cayenne.....	15	1 50
Sweet Mountain.....	15	1 50

POTATO.

	Market.
Early Vermont.....	
Early Rose.....	
Early Sunrise.....	
Burbank Seedling.....	
Dakota Red.....	
White Peach Blow.....	
Beauty of Hebron.....	
Magnum Bonum.....	
Snowflake.....	
White Star.....	
Mammoth Pearl.....	
White Elephant.....	

PUMPKIN.

	10	50
Sweet Potato.....	10	50
Cashaw.....	10	50
Cheese.....	10	50
Common Field.....	10	25

RADISH.

Long Scarlet Short Top.....	10	60
Early Long Scarlet (improved).....	10	60
Early Scarlet Turnip.....	10	60
White Tipped Scarlet.....	10	60
Early Deep Scarlet Turnip.....	10	60
Early Red Turnip.....	10	60
Early White Turnip.....	10	60
Early Scarlet, Olive Shaped.....	10	60
Wood's Early Frame.....	10	60
Early Yellow Summer Turnip.....	10	60
Golden Globe.....	10	60
Scarlet China Winter.....	10	60
White China Winter.....	10	60
Long Black Spanish Winter.....	10	60
Large White Spanish Winter.....	10	60
French Breakfast.....	10	60
White Strasburg.....	10	60
Red Strasburg.....	10	60

RAPE.

	QT.	BUS.
Winter and Summer.....	10	2 40

SALSIFY.

\$ 10 1 00

SPINACH.

Round Leaved Savoy.....	10	30
Long Standing.....	10	30
Large Leaved Flanders.....	10	30
Prickly Seeded.....	10	30
Viroflay.....	10	30

SQUASH.

Early White Bush.....	10	60
Long Green.....	10	60
Golden Summer Crook-neck.....	10	60
American Turban.....	10	60
Early Golden Bush.....	10	60
Winter Crook-neck.....	10	60
Boston Marrow.....	10	60
Hubbard.....	10	60
Cocoanut Squash.....	10	60

TOMATO.

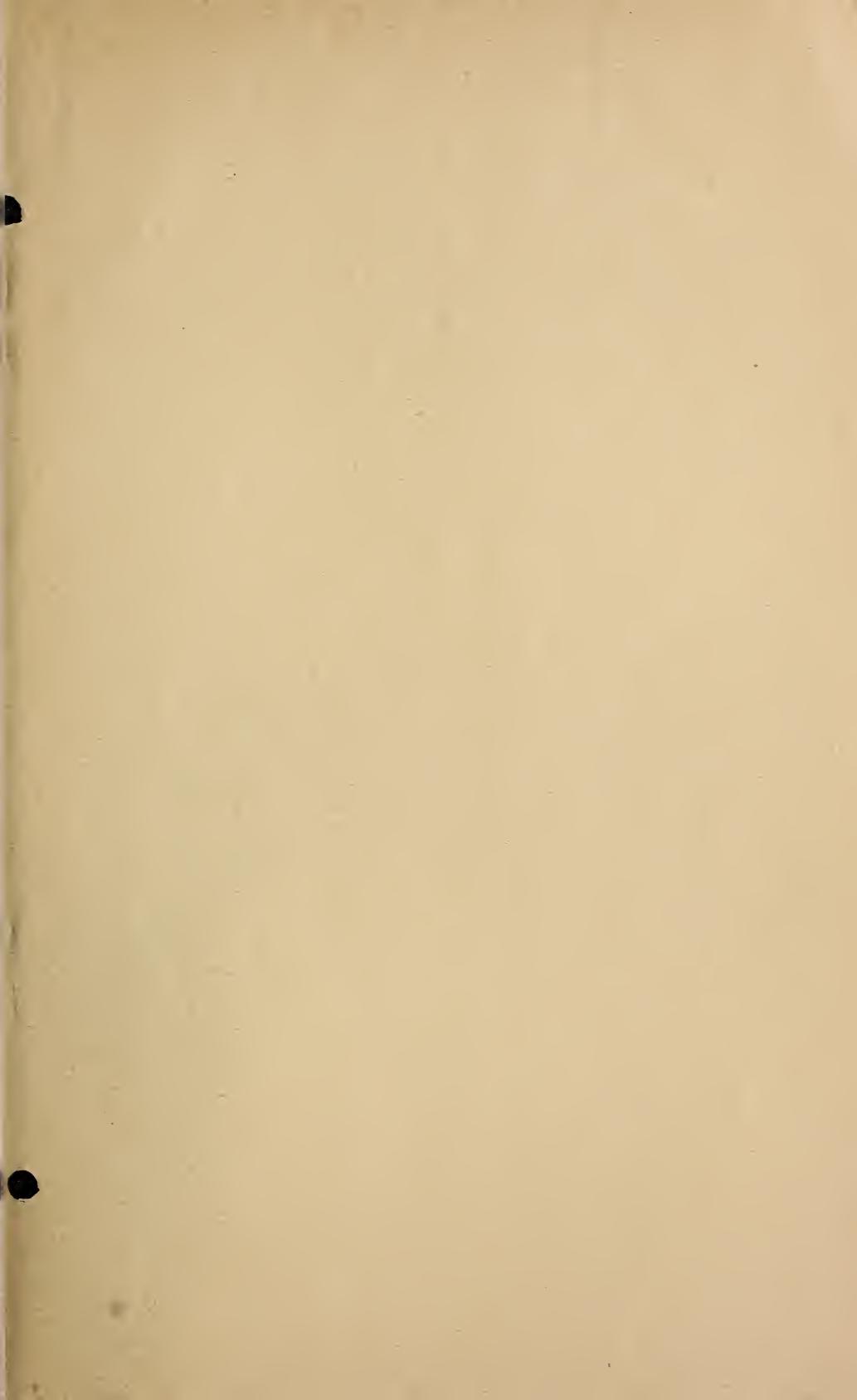
Extra Early Cluster.....	15	1 25
Extra Early Richmond.....	15	1 25
Hathaway's Excelsior.....	15	1 25
Acme.....	15	1 25
Paragon.....	15	1 25
Livingston's Perfection.....	15	1 25
Livingston's Favorite.....	15	1 25
Tilden.....	15	1 25
Trophy, Improved.....	15	1 25
Large Red.....	15	1 25
Cook's Favorite.....	15	1 25
Feejee Improved.....	20	2 00
Pear Shaped, (Yellow and Red).....	20	2 00
Livingston's Beauty, (new) p- pers only.....	15	1 25

TURNIP.

Early Purple Top Munich.....	10	40
Early Flat Dutch, (<i>Strap Leaved</i>)	10	40
Early Purple Top, (<i>Strap Leaved</i>)	10	40
Large Early Red Top Globe (<i>New</i>)	10	40
Early White Egg.....	10	40
Pomeranian White Globe, (<i>Strap Leaved</i>).....	10	40
White Norfolk.....	10	40
Cow Horn.....	10	40
Amber Globe, (<i>Strap Leaved</i>)....	10	40
Yellow Aberdeen.....	10	40
Robertson's Golden Ball (<i>Orange Jelly</i>).....	10	50
Purple Top Yellow Swede, (<i>Ruta Baga</i>).....	10	40
White Fleshed Purple Top Ruta Baga	10	40

HERBS.

Anise.....	15	
Caraway	15	
Fennel.....	15	
Lavender.....	15	
Pot Marigold.....	50	
Sweet Marjoram.....	20	1 75
Rosemary.....	20	
Sage.....	20	2 00
Sweet Basil.....	15	1 50
Summer Savory.....	15	1 50
Winter Savory.....	25	
Thyme.....	25	3 00





FOR DESCRIPTION SEE PAGE 50.